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WATER SUPPLY OUTLOOK FOR OREGON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE

and

OREGON STATE UNIVERSITY

and

STATE ENGINEER of OREGON

Data included in this report were obtained by the agencies named above
in cooperation with other Federal, State and private organizations.

AS OF
JUNE 1, 1967

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season as they affect runoff will add to be an effective average. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data or reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Listed below are water supply outlook reports based on Federal-State-Private Cooperative snow surveys. Those published by the Soil Conservation Service may be obtained from Soil Conservation Service, Room 507, Federal Building, 701 N. W. Glisan, Portland, Oregon 97209.

PUBLISHED BY SOIL CONSERVATION SERVICE

D. A. WILLIAMS, Administrator

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 507, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85205
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	P. O. Box 38, Boise, Idaho 83701
Montana	P. O. Box 855, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4001 Federal Building, Salt Lake City, Utah 84111
Washington	840 Bon Marche Bldg., Spokane, Washington 99206
Wyoming	P. O. Box 340, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK
for
OREGON
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

ISSUED
JUNE 8, 1967

Report prepared by

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and

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SOIL CONSERVATION SERVICE

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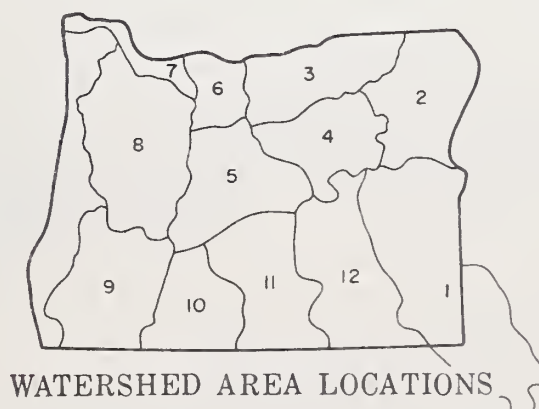
DIRECTOR
OREGON AGRICULTURAL,
EXPERIMENT STATION

CHRIS L. WHEELER

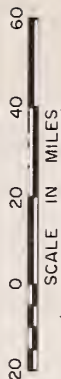
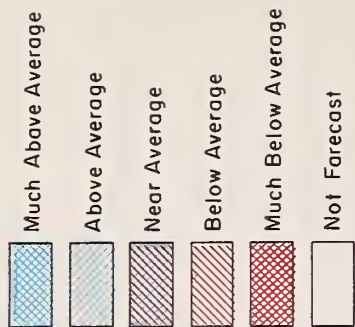
STATE ENGINEER
STATE OF OREGON

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WATER SUPPLY PROSPECTS



WATER SUPPLY OUTLOOK for OREGON

June 1, 1967

Water supplies for most farmers, ranchers and other water users in Oregon will be near average for the balance of this summer. Less than average water supplies are expected for lands served from the McKay reservoir near Pendleton and from Hood River, White River and the Mile Creeks in Wasco county and Wallowa Lake in the Enterprise-Joseph area. Elsewhere stored water supplies and expected runoff are mostly satisfactory.

PRECIPITATION

Precipitation in May was mostly below average except for 4 or 5 widely scattered stations where it was above the average. Much below average precipitation, varying from 10 to 37 percent of average, was measured at many stations in Umatilla, Morrow, Gilliam, Sherman, Wasco, Hood River, Jefferson, Crook and Deschutes counties according to the U. S. Weather Bureau. Other stations were nearer to average.

Temperatures were generally below normal during the first 8 days of the month and again in most of the last 7 days.

SNOW COVER

Snow-melt has proceeded at unusually rapid rates beginning on May 15th. On May 16th a water equivalent of 1.8 inches was melted from the snowpack radio-snow station in the central Cascades in a 24-hour period. The remaining mountain snowpacks are mainly above 5000 feet in elevation and are melting in an orderly manner. They contain about 15 to 20 percent more water than average for the June 1 date.

SOIL MOISTURE

Moisture in the soil mantle on the upper watersheds has increased beyond the average as a result of snow-melt and is excellent. A few stations at lower elevations have lost small amounts of water to the winds and sun exposure but are still well wetted.

RESERVOIR STORAGE

Water stored in 25 reservoirs furnishing most of Oregon's irrigation water supplies totals 2,494,100 acre feet - 8 percent more than was available last year and 2 percent more than the 15-year average (1948-62). Filled to the brim are Antelope reservoir on Jordan Creek in southern Malheur county, Coldsprings in Umatilla county, Hyatt Prairie in Jackson county and both Cottonwood and Drews Valley reservoirs in Lake county.

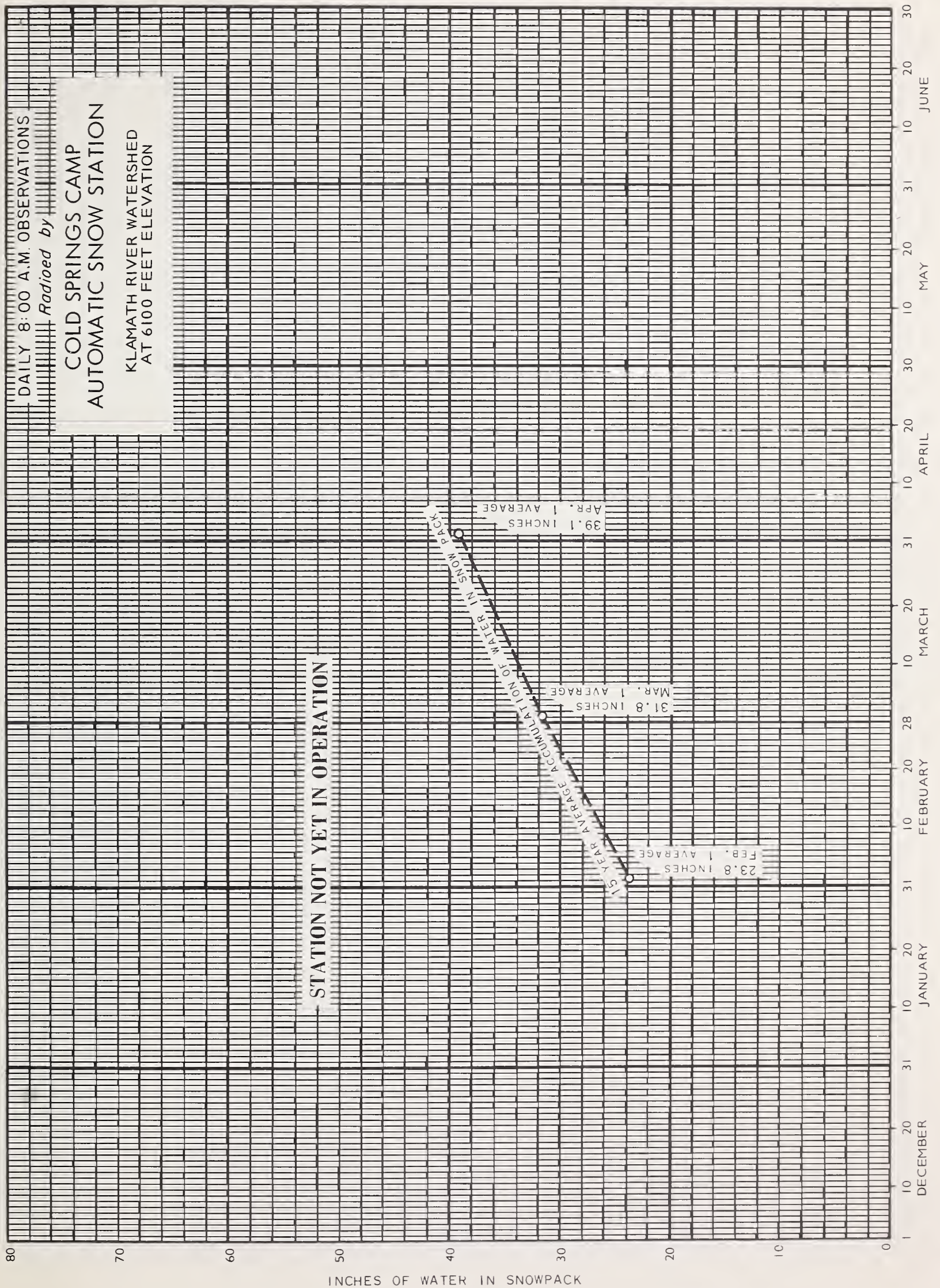
continued --

STREAMFLOW

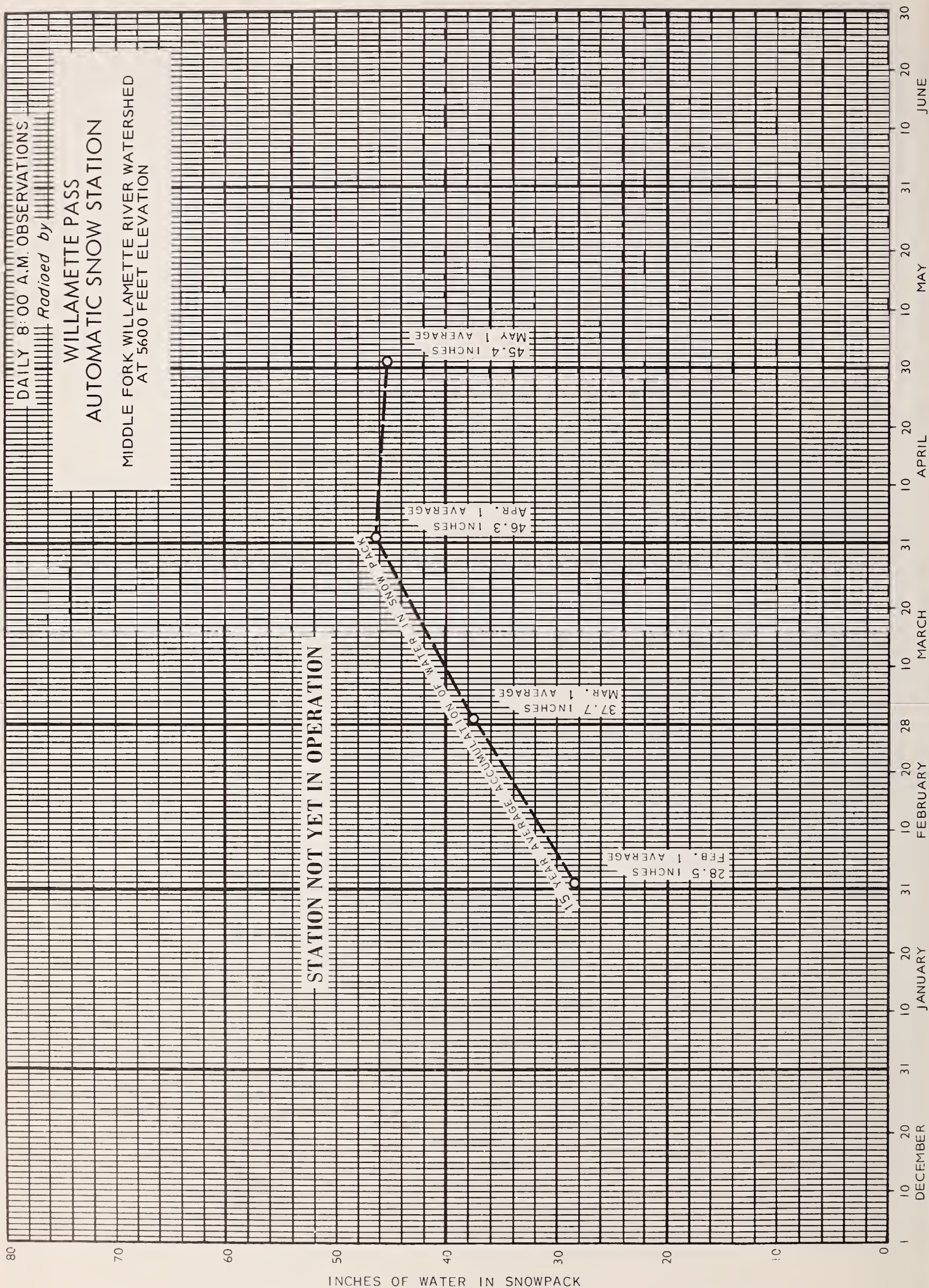
Forecasts of 1967 streamflow for the period May through July range from a low 76 percent of the 15-year average (1948-62) on White River in Wasco county to a high 249 percent of average for the inflow to Clear Lake reservoir on the upper reaches of Lost River in Klamath county. Willamette River tributaries flowing from the Cascades are expected to flow 81 to 90 percent of the average. Other streams are expected to flow from 90 to over 200 percent of the average.



U.S.D.A. SOIL CONSERVATION SERVICE DAILY RADIO REPORTS BY AUTOMATIC SNOW MEASURING STATION



U.S.D.A. SOIL CONSERVATION SERVICE DAILY RADIO REPORTS BY AUTOMATIC SNOW MEASURING STATION

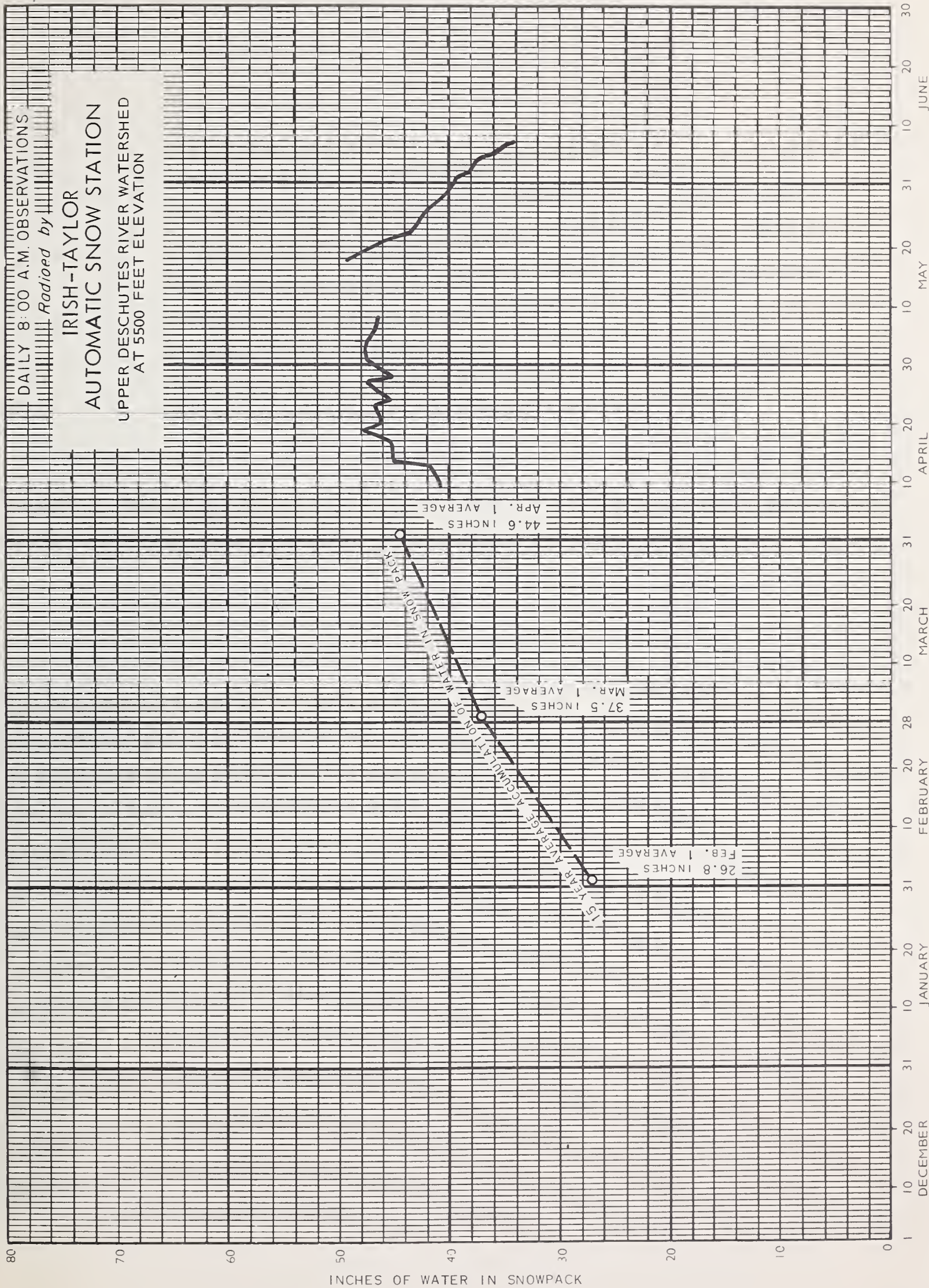


U.S.D.A. SOIL CONSERVATION SERVICE DAILY RADIO REPORTS BY AUTOMATIC SNOW MEASURING STATION

DAILY 8:00 A.M. OBSERVATIONS

Radioed by

IRISH-TAYLOR
AUTOMATIC SNOW STATION
UPPER DESCHUTES RIVER WATERSHED
AT 5500 FEET ELEVATION



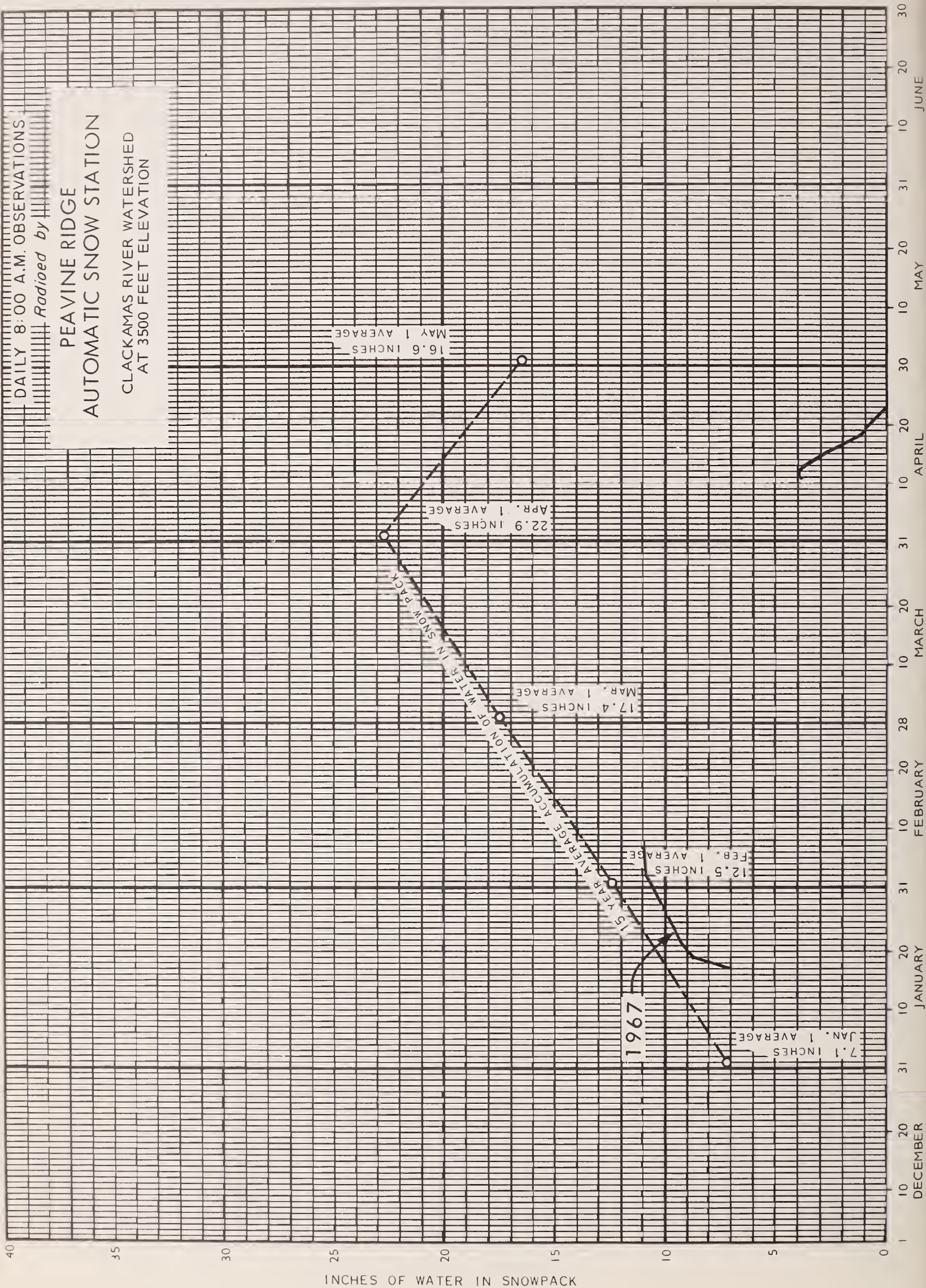
U.S.D.A. SOIL CONSERVATION SERVICE DAILY RADIO REPORTS BY AUTOMATIC SNOW MEASURING STATION

DAILY 8:00 A.M. OBSERVATIONS

Radioed by

PEAVINE RIDGE AUTOMATIC SNOW STATION

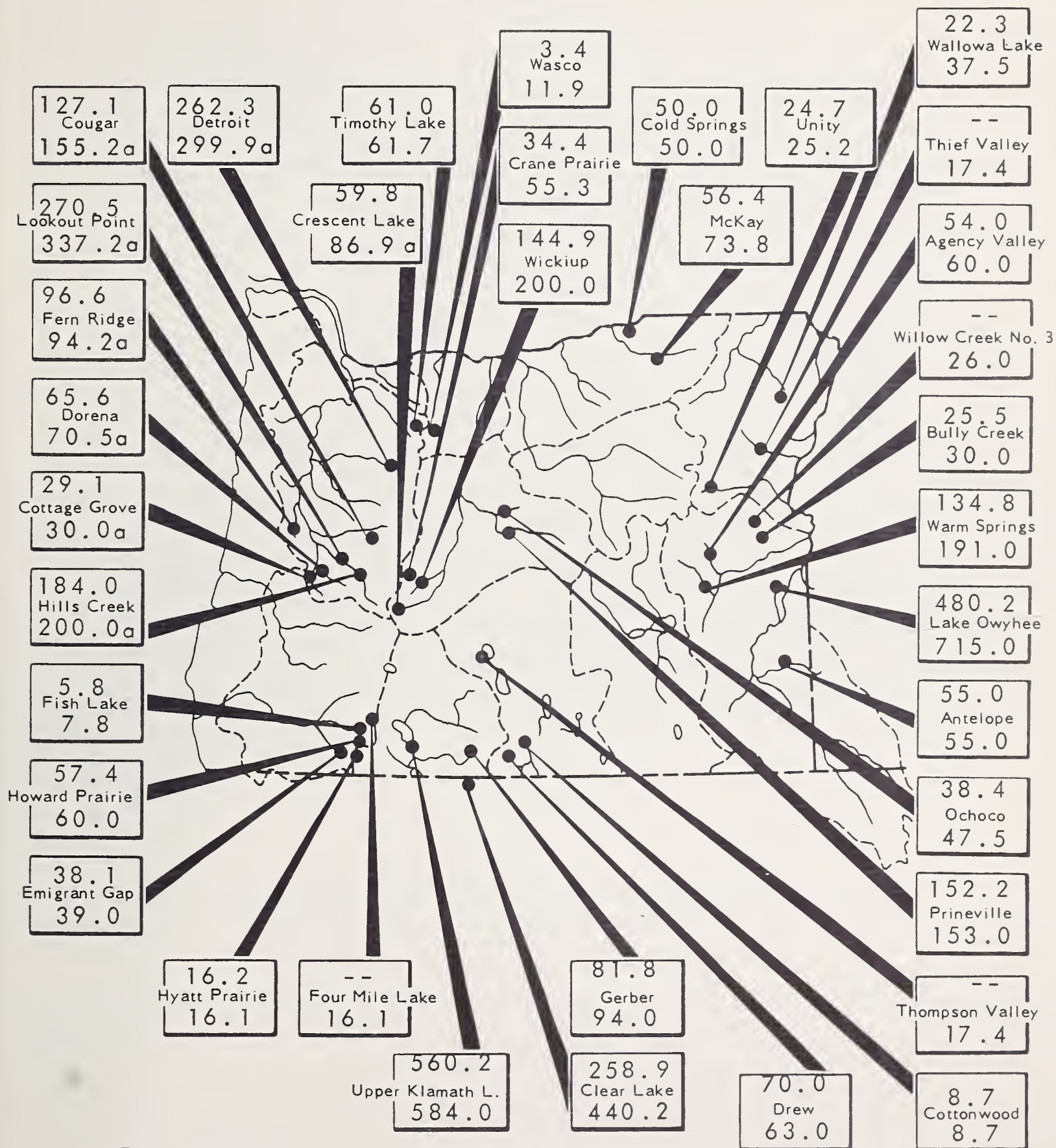
CLACKAMAS RIVER WATERSHED
AT 3500 FEET ELEVATION



STORAGE STATUS of OREGON RESERVOIRS

usable contents in thousands of acre feet

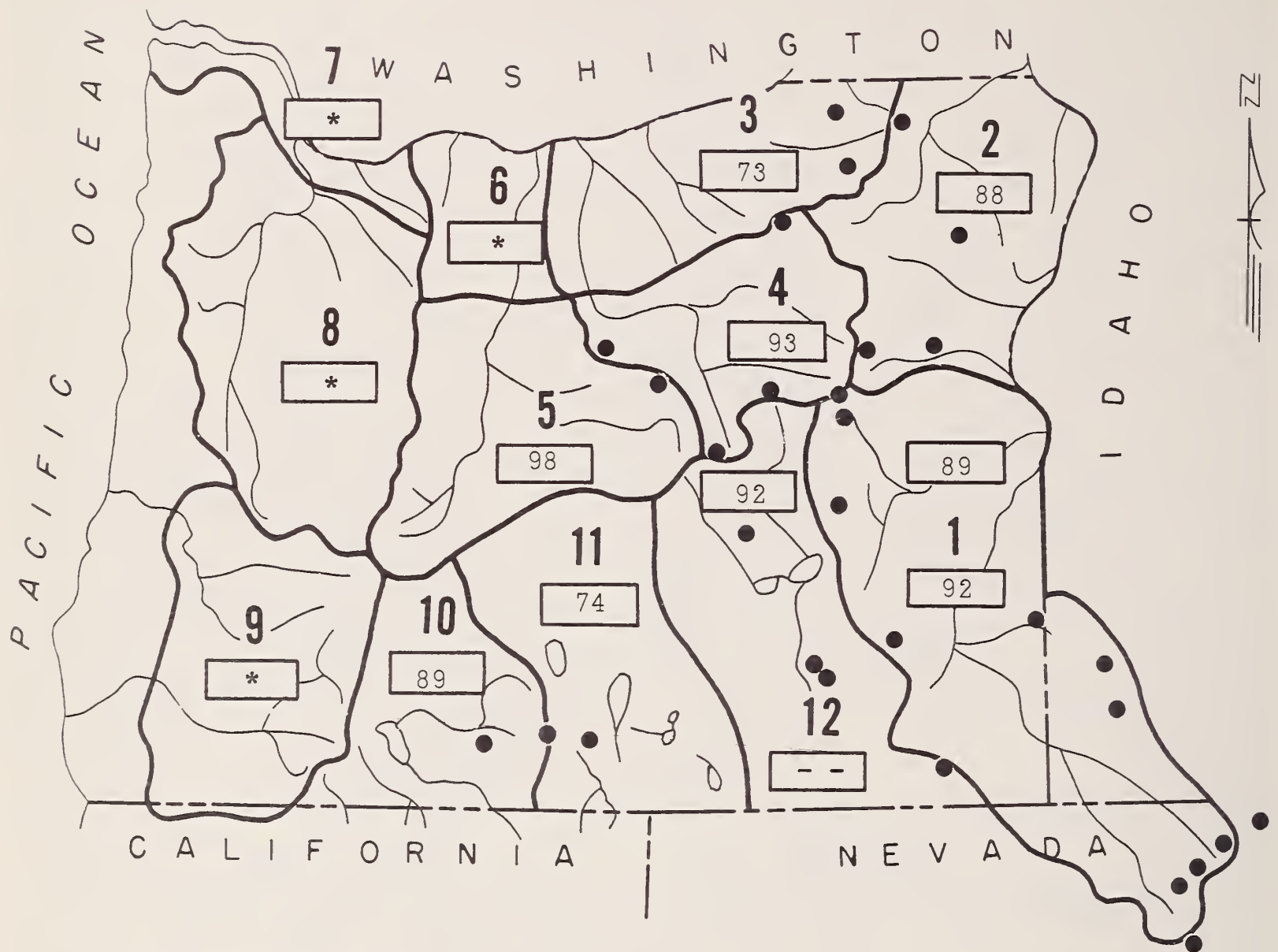
June 1, 1967



(a) Multiple purpose reservoir - space reserved for flood runoff.
N. R. - No report.

MOUNTAIN SOIL MOISTURE in OREGON as percent of capacity

June 1, 1967

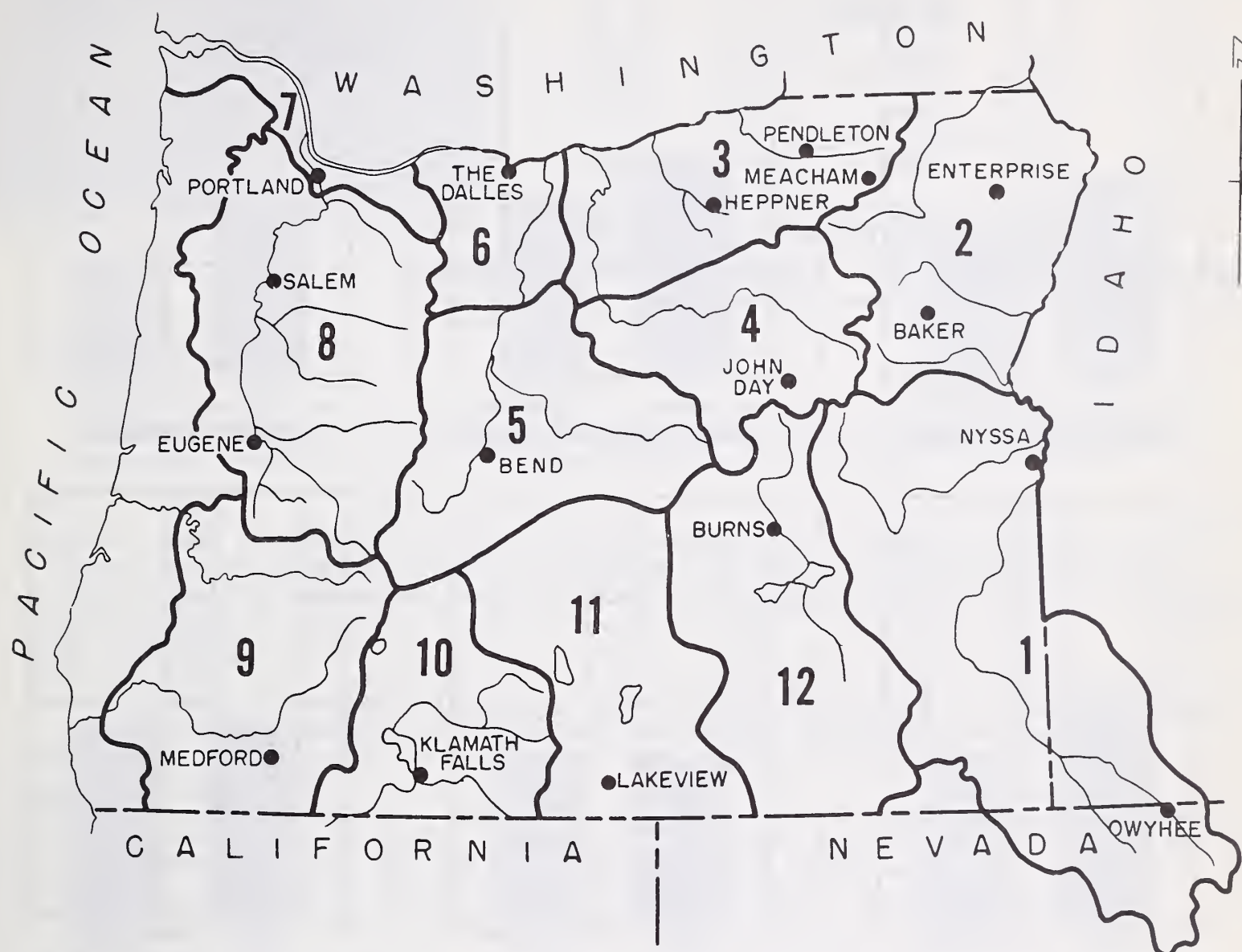


● Soil Moisture Station

**Moisture studies not yet developed in these areas.*

VALLEY PRECIPITATION in OREGON^a

June 1, 1967



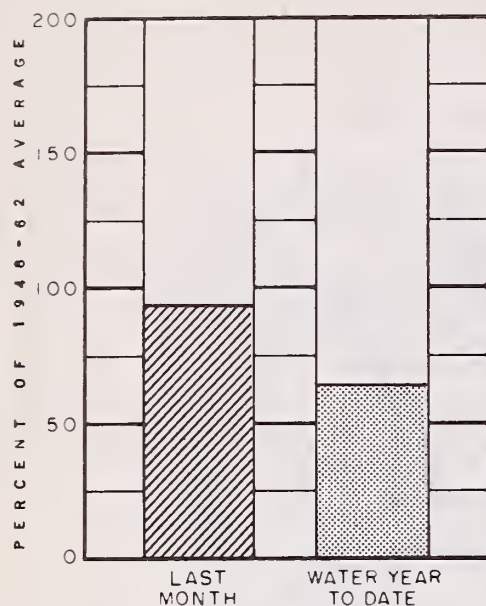
PRECIPITATION as PERCENT of the 1948-62 AVERAGE

STATION	LAST MONTH	WATER YEAR TO DATE ^b	STATION	LAST MONTH	WATER YEAR TO DATE ^b
BAKER APT.	50	105	LAKEVIEW	72	119
BEND	20	94	MEACHAM	63	114
BURNS	72	124	MEDFORD APT.	65	113
ENTERPRISE	48	92	NYSSA	92	100
EUGENE APT.	73	98	PENDLETON APT.	37	91
HEPPNER	37	104	PORTLAND APT.	46	90
JOHN DAY	74	109	SALEM APT.	86	67
KLAMATH FALLS APT.	127	105	THE DALLES	14	70
			OWYHEE (NEV.)	85	98

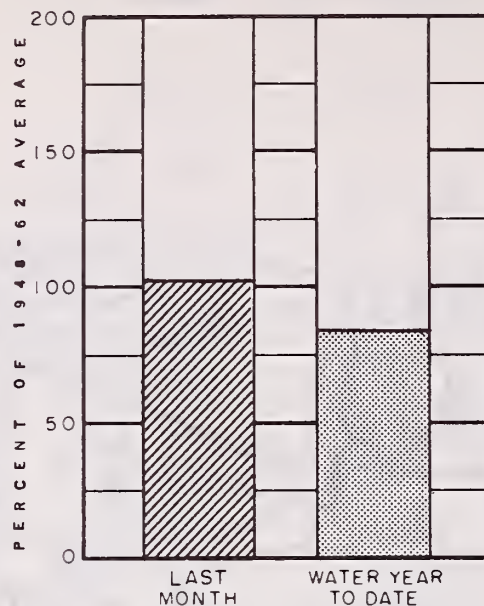
(a) Preliminary data furnished by the U.S. Weather Bureau. (b) Oct. 1 to date. (c) Report delayed.

CURRENT OREGON STREAMFLOW

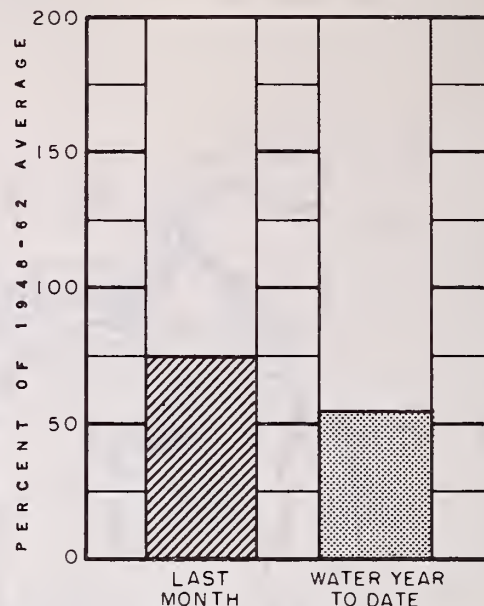
June 1, 1967



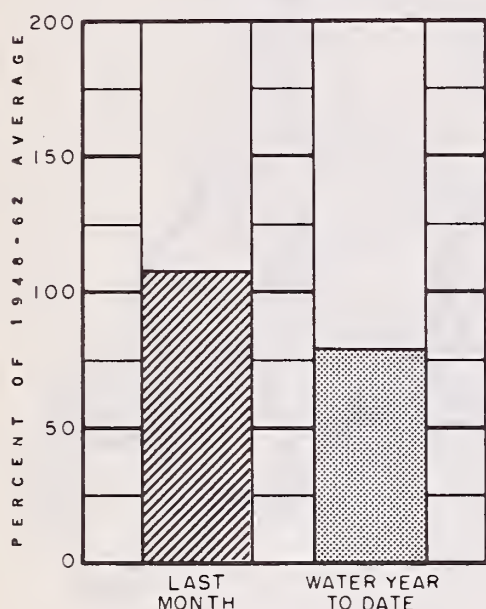
Owyhee Lake net inflow



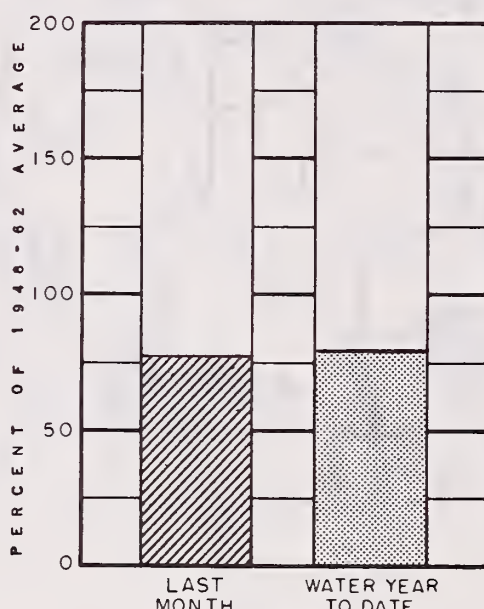
Grande Ronde at La Grande



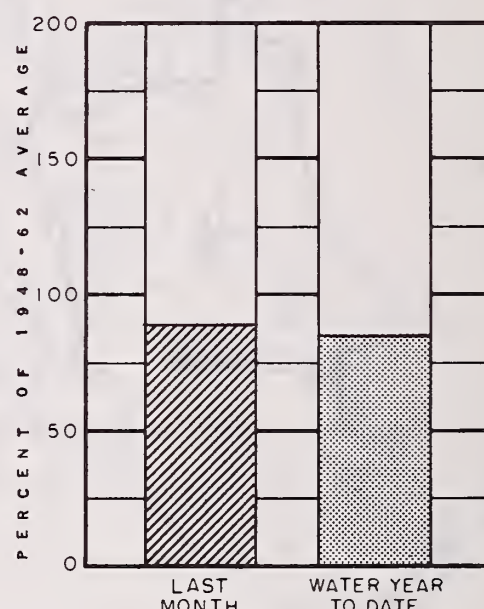
Umatilla at Umatilla



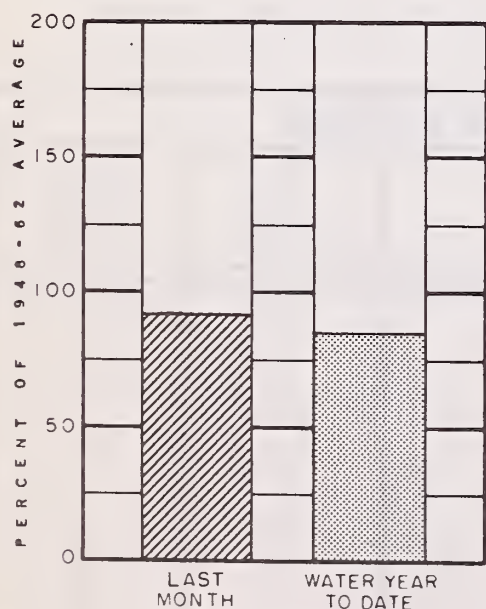
John Day at Service Creek



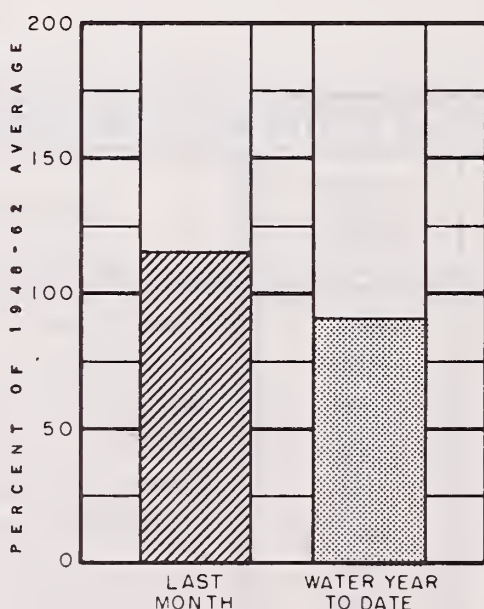
Deschutes at Moody



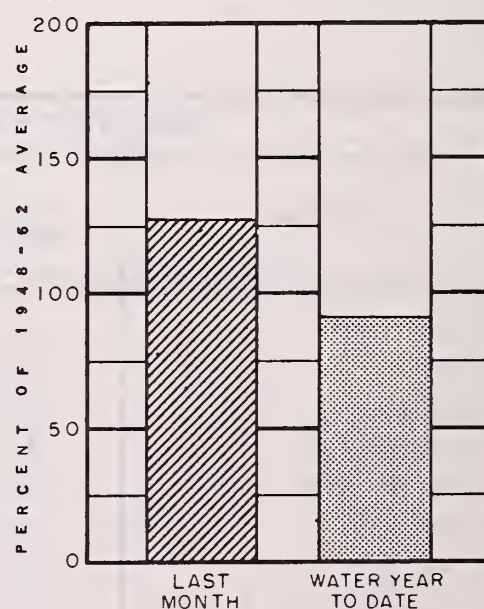
Mid. Fk. Willamette below No. Fk.



Umpqua near Elkton



Rogue at Raygold



Upper Klamath Lake net inflow

Data furnished by U.S. Geological Survey; The Pacific Power and Light Co.;
and North and South Boards of Control Owyhee Project.



WATER SUPPLY OUTLOOK OWYHEE, MALHEUR WATERSHEDS

OREGON

as of

June 1, 1967

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

GENERAL OUTLOOK

Malheur county ranchers, farmers and other water users will have adequate water supplies this summer. Forecasts of expected streamflow May through July will be sufficient when coupled with the good stored water supplies.

SNOW COVER

Snow cover remains only at the higher elevations but is more extensive than usual for June 1 conditions due to frequent cold spells. Precipitation has been near normal in May adding to the past month's runoff which was 94 percent average on the Owyhee.

SOIL MOISTURE

Moisture in the soil mantle on upper watersheds is 92 percent of capacity on the Owyhee and 89 percent on the Malheur watershed. These figures are above average.

RESERVOIR STORAGE

Water stored in Lake Owyhee increased by more than 20,000 acre feet during May bringing the total to 480,200 acre feet which will be adequate.

Antelope reservoir on Jordan Creek watershed is full at the 55,000 acre foot level and Jordan Creek continues to furnish a good water supply. It should be a very good year.

Total storage in the Malheur reservoirs, Warm Springs, Agency Valley and Bully Creek is 214,300 acre feet compared with 192,000 a. f. last year. This is a good supply.

STREAMFLOW

Inflow to Lake Owyhee for May through July is forecast at 152,000 acre feet or 90 percent of the 15-year average (1948-62). Jordan Creek is expected to flow 100,000 acre feet from April through July or 102 percent average.

North Fork of Malheur at Beulah is forecast to flow 36,000 acre feet May through July or 109 percent average. For the same period the Malheur near Drewsey is forecast to flow 40,000 acre feet or 118 percent average.

WATER SUPPLY OUTLOOK expressed as "Poor", "Fair", "Average" or "Excellent"

RESERVOIR STORAGE (1,000 Ac. Ft.) June 1, 1967

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Boulder Creek	Spring peak flows are past.	Average
Bully Creek		Fair
Cow Creek		Fair
Jordan Creek		Excellent
Jordan Valley Irrig. Dist.		Excellent
McDermitt Creek		Average
Oregon Canyon Creek		Average
Owyhee Project		Average
Succor Creek		Average
Termile Creek		Average
Vale-Oregon Irrig. Dist.		Average
Warm Springs Irrig. Dist.		Average
Willow Creek (Reservoired)		Average

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Agency Valley	60.0	54.0	34.7	50.2
Antelope	55.0	55.0	19.3	35.0 ^m
Bully Creek	30.0	25.5	15.9	- -
Owyhee	715.0	480.2	545.7	545.3
Warm Springs	191.0	134.8	141.4	124.1
Willow Creek #3	26.0	b		

STREAMFLOW FORECASTS^a(1,000 Ac. Ft.) as of June 1, 1967

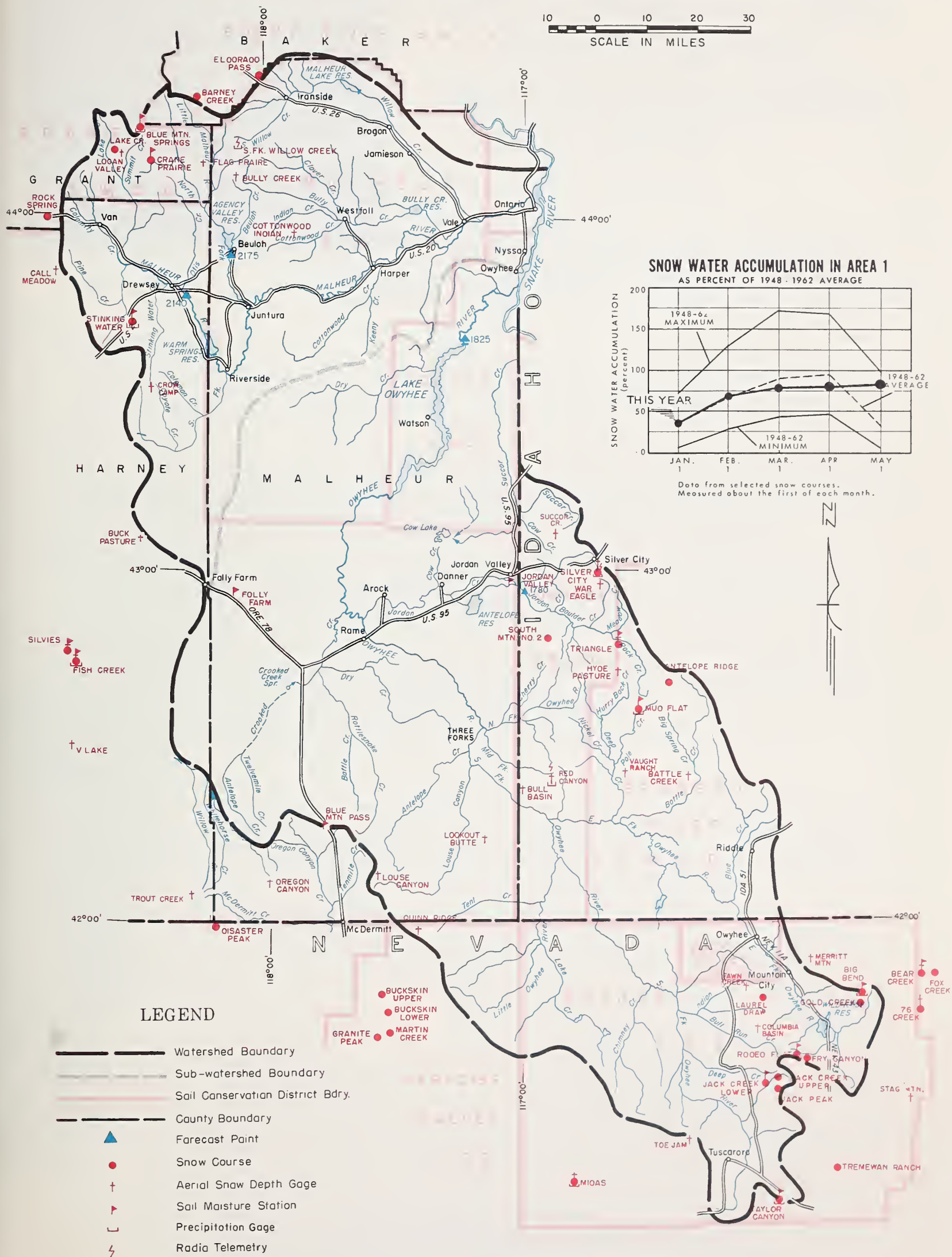
FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT. OF AVERAGE ⁱ
NO.	NAME				
1780	Jordan Creek above Lone Tree Creek	100	April-July	98	102
2140	Malheur near Drewsey	40	May-July	34	118
		42	May-Sept.	35	120
2175	Malheur, North Fork at Beulah ^d	36	May-July	33	109
		40	May-Sept.	38	105
1825	Owyhee Reservoir net Inflow ^k	152	May-July	168	90
		175	May-Sept.	184	95

SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
		DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
NAME	ELEVATION						
Bear Creek (Nev.)	7800	72	16.8	b			
Big Bend (Nev.)	6700	48	16.7	4-27-67	15.9 ^f	16.5 ^f	16.7 ^f
Blue Mountain Springs	5900	42	16.9	5-29-67	13.1	11.4	13.5
Crane Prairie	5375	48	18.2	5-29-67	18.0	17.1	18.0
Folly Farm	4450	30	12.5	b			
Jack Creek, Lower (Nev.)	6800	48	8.6	4-28-67	8.3 ^f	8.1	8.4 ^f
Jordan Valley	4390	48	19.3	b			
Mud Flat (Ida.)	5500	48	12.8	b			
Rodeo Flat (Nev.)	6800	42	11.0	5-1-67	9.2 ^f	11.0 ^f	11.0 ^f
Stinking Water Summit	4800	48	21.9	c			
Taylor Canyon	6200	48	15.1	4-28-67	13.2 ^f	14.9 ^f	15.0 ^f
Triangle (Ida.)	5150	48	16.6	b			

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (l) Ground measurement. (m) Average for 5 or more years in base period.

OWYHEE, MALHEUR WATERSHEDS



WATER SUPPLY OUTLOOK BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS OREGON

as of

June 1, 1967

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER



GENERAL OUTLOOK

Ranchers, farmers and other water users in Wallowa, Union and Baker counties can expect adequate water supplies this summer. Present stored water supplies added to expected runoff of mountain streams will provide sufficient water.

SNOW COVER

Snow cover remains only at the higher elevations but is more extensive than usual for June 1 conditions due to frequent cold spells. Precipitation has been about 50 to 60 percent normal during May but much snow remains to melt-off.

SOIL MOISTURE

Moisture in the soil mantle on upper watersheds has increased to 88 percent of capacity which is much better than average.

RESERVOIR STORAGE

Storage in Wallowa Lake was 22,300 acre feet on June 1 compared with 29,200 a. f. a year ago. This low storage figure will possibly be adequate when added to the 118 percent average streamflow that is expected.

Unity reservoir holds 24,700 acre feet and can easily fill.

STREAMFLOW

Forecasts of May through June streamflow on Burnt River are set at 16,000 acre feet or 100 percent average. Powder River is expected to flow 49,000 acre feet or 111 percent May through July. Flow of Catherine Creek is set at 58,000 acre feet May through September and the Grande Ronde at La Grande is estimated to produce 107,000 acre feet or 91 percent average May through July.

Flow of the East Fork of Wallowa River is forecast at 10,400 acre feet or 118 percent average May through July. Other Wallowa tributaries are forecast as follows: Hurricane Creek at 108 percent April through September, Lostine River 120 percent for the same six months and Bear Creek 110 percent for the May-September period.

WATER SUPPLY OUTLOOK expressed as "Poor", "Fair", "Average" or "Excellent"

RESERVOIR STORAGE (1,000 Ac. Ft.) June 1, 1967

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Alder Slope	Spring peak flows are past.	Average
Baker Valley		Average
Big Creek		Average
Clover Cr. (nr. N. Powder)		Fair
Cove		Average
Durkee		Fair
Eagle Valley		Average
Elgin		Fair
Enterprise-Joseph		Average
Hereford-Bridgeport		Average
Imnaha River		Average
LaGrande-Island City		Fair
Lostine-Wallowa		Average
No. Powder River-Wolf Cr.		Average
Pine Valley		Average
Powder River-Elk Creek		Fair
Summerville		Fair
Sumpter Valley		Fair
Union-Hot Lake		Average
Unity		Average

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Thief Valley	17.4	<i>ib</i>		
Unity	25.2	24.7	18.1	22.6
Wallowa Lake	37.5	22.3	29.2	27.2

STREAMFLOW FORECASTS^a(1,000 Ac. Ft.) as of June 1, 1967

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE ⁱ
NO.	NAME				
3305	Bear near Wallowa	67	May-Sept.	61	110
2730	Burnt near Hereford ^d	16.0	May-June	16.0	100
		17.8	May-Sept.	17.8	100
3200	Catherine near Union	58	May-Sept.	58	100
3190	Grande Ronde at LaGrande	107	May-July	118	91
		110	May-Sept.	121	91
3295	Hurricane Creek near Joseph	52	April-Sept.	48	108
2920	Imnaha at Imnaha	375	April-Sept.	318	118
3300	Lostine near Lostine	157	April-Sept.	131	120
2755	Powder River near Baker	49	May-July	44	111
		51	May-Sept.	45	113
3250	Wallowa, East Fork near Joseph ^d	10.4	May-July	8.8	118
		13.7	May-Sept.	11.2	122

SOIL MOISTURE

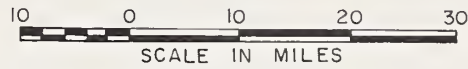
SOIL MOISTURE		PROFILE (Inches)		SOIL MOISTURE (Inches)			
STATION		DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
NAME	ELEVATION						
Blue Mountain Summit	5100	36	16.8	5-31-67	16.0	12.3	15.5
Emigrant Springs	3925	48	22.3	<i>b</i>			
Tollgate	5070	48	23.6	5-26-67	19.4	18.5	19.1

SNOW

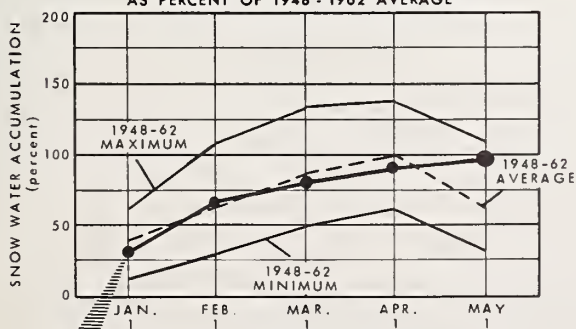
SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	ELEVATION				LAST YEAR	1948-62 AVERAGE
Tollgate	5070	5/26	2	1.2	0.0	- -

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS



SNOW WATER ACCUMULATION IN AREA 2
AS PERCENT OF 1948-1962 AVERAGE



THIS YEAR Data from selected snow courses.
Measured about the first of each month.

LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bary.
- County Boundary
- Forecast Point
- Snow Course
- Soil Moisture Station
- Aerial Snow Depth Gage
- Precipitation Gage

WATER SUPPLY OUTLOOK UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS

OREGON

as of

June 1, 1967

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

GENERAL OUTLOOK

Farmers, ranchers and other water users of Umatilla, Morrow, Gilliam and Sherman counties can expect usual summer water supplies this season. Only a possible shortage in the stored water supplies in McKay reservoir can mar this picture.

SNOW COVER

Snow cover remains only at the highest elevations but is more extensive than usual for June 1 conditions due to frequent cold spells. Precipitation in May has been only half normal but snow-melt brought streamflow up to normal for the month.

SOIL MOISTURE

Moisture in the soil mantle on upper watersheds is well above average. Soils at lower elevations have begun to dry at the surface.

RESERVOIR STORAGE

Cold Springs Reservoir is at capacity at 55,000 acre feet. McKay reservoir received a strong inflow during May and now contains 56,400 acre feet compared with 37,300 a. f. a year ago. This supply is not up to the amount desired for a good water season.

STREAMFLOW

Forecasts of streamflow to be expected in the May through July period are set at 100 percent of the 15-year average (1948-62) for Butter Creek, Umatilla river at Pendleton and the South Fork of the Walla Walla near Milton.

Flow of McKay Creek May through September is expected to be only 13,000 acre feet or 92 percent average this season.

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WATER SUPPLY OUTLOOK

expressed as "Poor", "Fair",
"Average" or "Excellent"

RESERVOIR STORAGE (1,000 Ac. Ft.) June 1, 1967

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Walla Walla River, No. Fk.	Spring peak flows are past.	Fair
Walla Walla River, So. Fk.		Fair
Walla Walla River, Main		Fair
Walla Walla River, Little		Fair
Couse Creek		Fair
Dry Creek		Fair
Pine Creek		Fair
Umatilla River, Main		Average
Wildhorse Creek		Fair
Umatilla R. (Cold Springs Reservoir)		Average
Umatilla R. (McKay Res.)		Fair
McKay Creek		Fair
Birch Creek		Fair
Butter Creek		Fair
Willow Creek		Fair
Rhea Creek		Fair
Rock Creek (John Day tributary)		Fair

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Cold Springs	50.0	50.0	37.8	48.0 ^m
McKay	73.8	56.4	37.3	67.1

STREAMFLOW FORECASTS^a(1,000 Ac. Ft.) as of June 1, 1967

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT. OF AVERAGE ⁱ
NO.	NAME				
0320	Butter Creek near Pine City	4.7	May-July	4.7	100
0225	McKay near Pilot Rock	13.0	May-Sept.	14.1	92
0200	Umatilla River near Gibbon	52	May-July	52	100
		58	May-Sept.	58	100
0210	Umatilla River at Pendleton	92	May-July	92	100
		97	May-Sept.	97	100
0100	Walla Walla, So. Fork near Milton	44	May-July	44	100
		58	May-Sept.	58	100

SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Athena-Weston	1700	48	18.7	5-26-67	11.5	12.4	14.3
Battle Mountain Summit	4340	48	13.8	^b			
Emigrant Springs	3925	48	22.3	^b			
Tollgate	5070	48	23.6	5-26-67	19.4	18.5	19.1

SNOW









SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	1948-62 AVERAGE
Blue Mountain Camp	4300	5/26	0	0.0	0.0	--
Tollgate	5070	5/26	2	1.2	0.0	--
Weston Mountain	2700	5/26	0	0.0	0.0	--

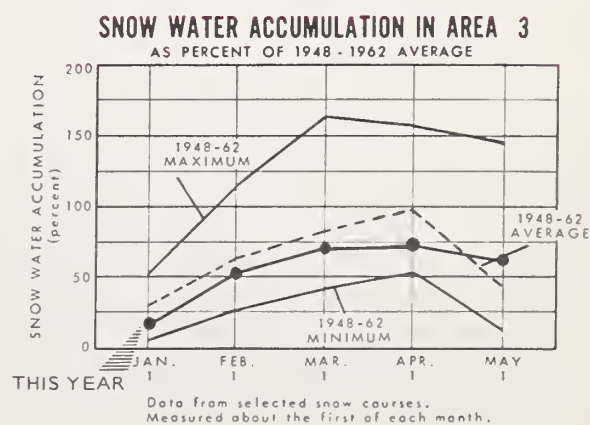
(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

UMATILLA, WALLA WALLA, WILLOW, ROCK,
LOWER JOHN DAY WATERSHEDS



LEGEND

-  Watershed Boundary
-  Sub-watershed Boundary
-  Soil Conservation District Bdry.
-  County Boundary
-  Forecast Point
-  Snow Course
-  Soil Moisture Station
-  Precipitation Gage



WATER SUPPLY OUTLOOK UPPER JOHN DAY WATERSHEDS OREGON

as of

June 1, 1967



U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

GENERAL OUTLOOK

John Day basin ranchers and other water users can expect average water supply conditions for the balance of the season. Snow-melt produced excellent streamflow during May and will provide near average water supplies this summer.

SNOW COVER

Snow cover remains only at high elevations but is a bit more extensive than usual for June 1 conditions due to frequent cold spells. Precipitation in May has been about two-thirds of the normal.

SOIL MOISTURE

Moisture in the soil mantle on upper watersheds has increased from 89 to 93 percent of capacity which is much better than average.

STREAMFLOW

Streamflow during May was strong, averaging about 110 percent of the 15-year average 1948-62.

Forecasts for the April through July flow of local streams indicate the John Day at Prairie City should produce about 41,000 acre feet or 89 percent of the average this season.

Flow of the Middle Fork at Ritter is forecast at 115,000 acre feet or 91 percent average.

Strawberry Creek is expected to flow about 8,000 acre feet or 99 percent average April through July.

STREAMFLOW FORECASTS^a(1,000 Ac. Ft.) as of June 1, 1967

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE ⁱ
NO.	NAME				
0385	John Day at Prairie City	41	April-July	46	89
		44	April-Sept.	51	86
0440	John Day, Middle Fork at Ritter	115	April-July	127	91
		120	April-Sept.	131	92
0375	Strawberry near Prairie City	8.0	April-July	8.1	99
		8.7	April-Sept.	8.8	99

WATER SUPPLY OUTLOOK ^{expressed as "Poor", "Fair", "Average" or "Excellent"}

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Beech Creek	Spring peak flows are past.	Fair
Beech Creek-Fox-Long Cr.		Fair
Bridge-Mountain Creeks		Fair
Camas Creek		Fair
Cherry Creek		Fair
Indian-Pine Creeks		Average
John Day River, Main Fork		Average
John Day River, Mid. Fork		Average
John Day River, N. Fork		Average
John Day River, S. Fork		Average
Monument-Kimberly		Average
Strawberry Creek		Average

RESERVOIR STORAGE (1,000 Ac. Ft.) June 1, 1967

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE

SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
		DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
NAME	ELEVATION						
Battle Mountain Summit	4340	48	13.8	^b			
Blue Mountain Springs	5900	42	16.9	5-29-67	13.1	11.4	13.5
Blue Mountain Summit	5100	36	16.8	5-31-67	16.0	12.3	15.5
Derr	5670	24	9.0	5-29-67	9.0	- -	- -
Marks Creek	4540	36	14.1	5-31-67	13.4	12.9	13.4
Snow Mountain	6300	48	16.7	6-2-67	16.7	16.4	16.6
Starr Ridge	5150	36	10.6	5-29-67	10.4	9.0	10.4

SNOW

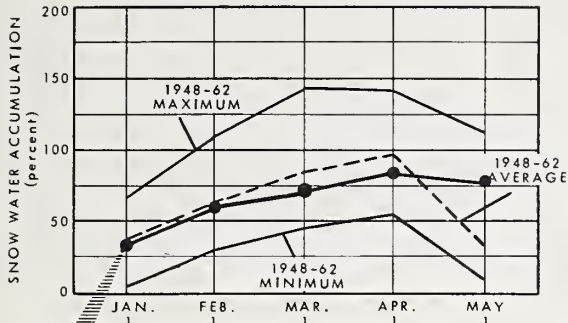
SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	ELEVATION				LAST YEAR	1948-62 AVERAGE
Snow Mountain	6300	6/2	0	0.0 ^j	- -	- -

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

UPPER JOHN DAY WATERSHEDS

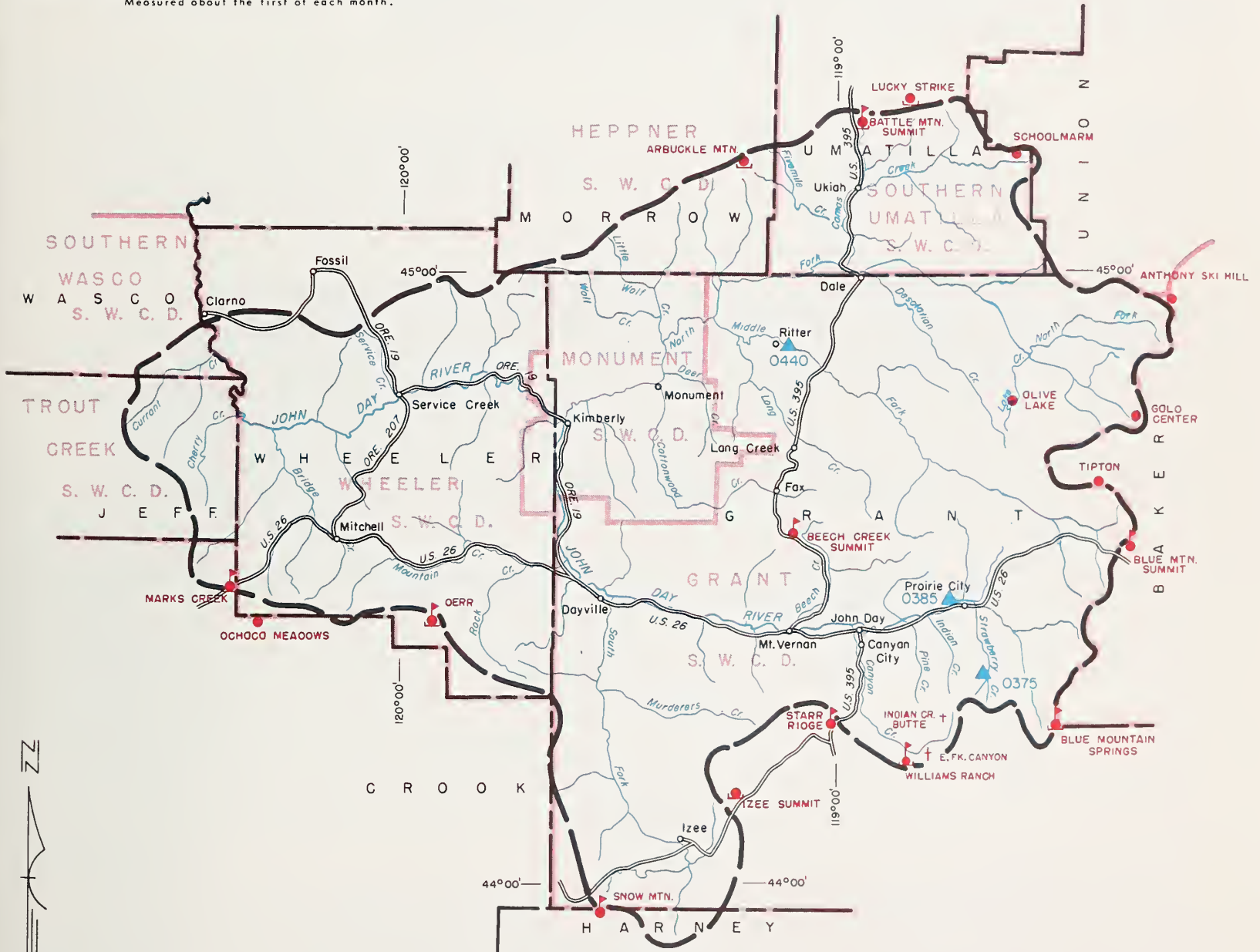
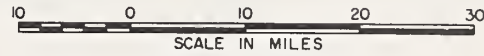
SNOW WATER ACCUMULATION IN AREA 4

AS PERCENT OF 1948 - 1962 AVERAGE



THIS YEAR

0-100 from selected snow courses.
Measured about the first of each month.



LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- ▲ Forecast Point
- Snow Course
- ▼ Soil Moisture Station
- † Aerial Snow Depth Gage
- ⌋ Precipitation Gage



WATER SUPPLY OUTLOOK UPPER DESCHUTES, CROOKED WATERSHEDS OREGON

as of

June 1, 1967

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

GENERAL OUTLOOK

Ranchers, farmers and other water users in Deschutes, Jefferson and Crook counties can expect summer water supplies to be somewhat below average this year. Precipitation during May was far below the average. Inflow to Wickiup reservoir is unusually low this year.

SNOW COVER

Snow cover has melted off below about 4700 feet elevation but at higher elevations the snow is more extensive than usual for June 1 due to frequent cold spells. Snow at Cascade Summit snow course is 140 percent of the 15-year average. Snow has been melting at greater than normal rates since about mid-May but stream runoff has been orderly.

SOIL MOISTURE

Moisture in the soil mantle on upper watersheds has continued to increase and is now 98 percent of capacity which is much better than the average.

RESERVOIR STORAGE

Storage in Prineville and Ochoco reservoirs is now 152,200 and 38,400 acre feet respectively. This is a good supply for the Ochoco Irrigation District.

Crescent Lake held 59,800 acre feet on June 1 but is still short of the 65,000 acre feet held a year ago. Crane Prairie was down to 34,400 acre feet on June 1, about the same as the 33,500 acre feet of last year.

Wickiup contained only 144,900 acre feet on June 1, below the 156,300 acre feet of a year ago. The most disturbing fact here is that the streams flowing into Wickiup are producing only about 73 to 77 percent of their normal flows. It looks as if the North Unit may have a "tight" water supply this season.

STREAMFLOW

Crooked River near Post is forecast to flow 78,000 acre feet May through July or 170 percent of the 15-year average (1948-62). Inflow to Ochoco reservoir is forecast at 16,800 acre feet or 102 percent.

The flow at Benham Falls on the Deschutes is forecast at 262,000 acre feet May through July or 80 percent average. The May through September period should see about 430,000 acre feet or 79 percent average flow.

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WATER SUPPLY OUTLOOK

expressed as "Poor", "Fair",
"Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Arnold Irrigation District	Spring peak flows are past.	Average
Bear Creek		Average
Beaver Creek		Average
Camp Creek		Average
Central Ore. Irrig. Dist.		Fair
Crooked River		Average
Deschutes River		Fair
Hay-Trout Creeks		Fair
Lone Pine Irrig. Dist.		Average
Mill Creek		Fair
North Unit Irrig. Dist.		Fair
Ochoco Creek		Fair
Sisters Irrigation Dist.		Average
Snow Creek Irrig. Dist.		Fair
Squaw Creek Irrig. Dist.		Average
Swalley Ditch		Average
Tumalo Project		Average
Walker Basin Irrig. Dist.		Average

RESERVOIR STORAGE (1,000 Ac. Ft.) June 1, 1967

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Crane Prairie	55.3	34.4	33.5	44.4
Crescent Lake	86.9	59.8	65.0	48.1
Ochoco	47.5	38.4	29.1	39.2
Prineville	153.0	152.2	135.0	- -
Wickiup	200.0	144.9	156.3	169.9

STREAMFLOW FORECASTS^a(1,000 Ac. Ft.) as of June 1, 1967

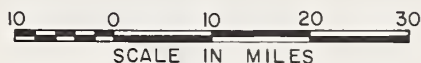
FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT. OF AVERAGE ⁱ
NO.	NAME				
0535	Crane Prairie Reservoir total Inflow	79	May-July	79	100
		124	May-Sept.	127	98
0600	Crescent at Crescent Lake ^d	21	May-July	22	95
		26	May-Sept.	29	90
0795	Crooked near Post	78	May-July	46	170
		80	May-Sept.	48	167
0645	Deschutes at Benham Falls ^d	262	May-July	328	80
		430	May-Sept.	541	79
0500	Deschutes below Snow Creek	59	May-Sept.	68	86
0630	Deschutes, Little near Lapine ^d	83	April-July	99	83
		95	April-Sept.	113	84
0848	Ochoco Reservoir net Inflow	16.8	May-Sept.	16.5	102
0555	Odell near Crescent	30	April-Sept.	34	88
0750	Squaw near Sisters	53	April-Sept.	56	95
0730	Tumalo near Bend ^d	50	April-Sept.	54	92

SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
		DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
NAME	ELEVATION						
Derr	5670	24	9.0	5-29-67	9.0	- -	- -
Marks Creek	4540	36	14.1	5-31-67	13.4	12.9	13.4
Snow Mountain	6300	48	16.7	6-2-67	16.7	16.4	16.6

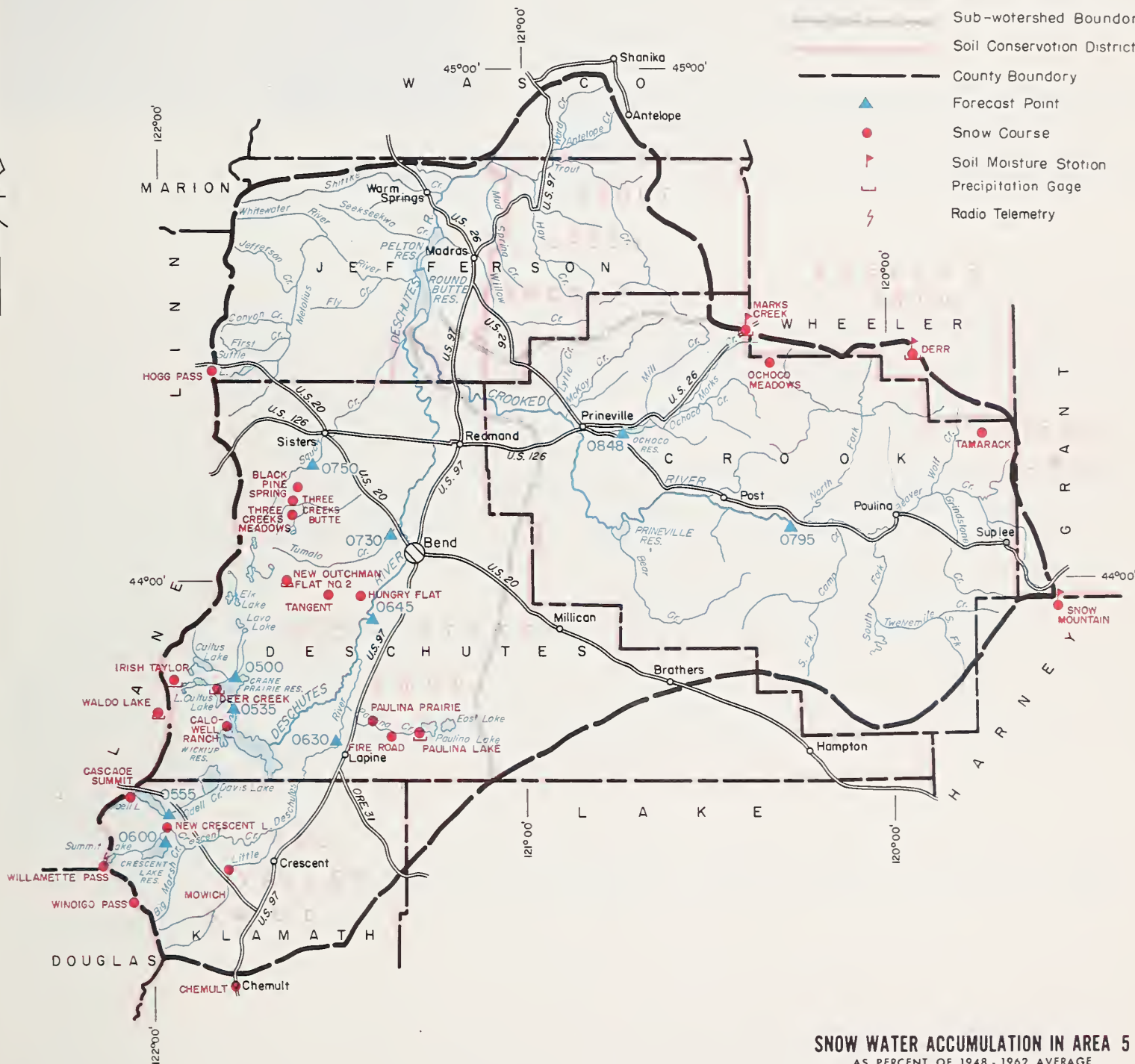
(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

UPPER DESCHUTES, CROOKED WATERSHEDS

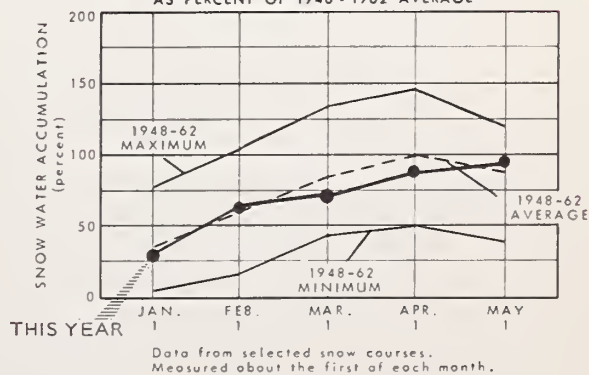


LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- Forecast Point
- Snow Course
- Soil Moisture Station
- Precipitation Gage
- Radio Telemetry



SNOW WATER ACCUMULATION IN AREA 5
AS PERCENT OF 1948-1962 AVERAGE



SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	ELEVATION				LAST YEAR	1948-62 AVERAGE
Cascade Summit	4880	5/31	26	10.9	0.0	7.8 ^m
Cascade Summit (Alternate)	4880	5/31	25	10.5	- -	- -
Hogg Pass	4755	6/1	54	25.7	17.2	- -
Hungry Flat	4400	5/28	0	0.0	0.0	- -
New Dutchman Flat #2	6400	5/28	77	40.4	27.2	- -
Tangent	5400	5/28	0	0.0	0.0	- -
Waldo Lake	5500	5/25	50	23.2	- -	- -
Snow Mountain	6300	6/2	0	0.0	- -	- -
RADIO REPORT BY AUTOMATIC SNOW-MEASURING STATION						
			<u>Time</u>			
Irish Taylor	5400	6/1	8:01 A.M.	39.4	- -	- -

WATER SUPPLY OUTLOOK HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS

OREGON

as of

June 1, 1967

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

GENERAL OUTLOOK

Farmers, orchardists and other water users in the Hood River area can expect below average water supplies this summer. Streams in this area will be producing less than average amounts of water.

SNOW COVER

Snow cover remains only at the higher elevations but is more extensive than usual for June 1 conditions due to frequent cold spells. Precipitation was 10 to 30 percent of normal for May.

SOIL MOISTURE

Moisture in the soil mantle on the upper watersheds has increased due to snow-melt and is about average for June 1.

RESERVOIR STORAGE

Storage in Wasco reservoir is only 3,400 acre feet which is 79% of last years June 1 contents.

STREAMFLOW

Forecasts of May through July on the Hood River are set at 88% of average while the White River nr. Tygh Valley is expected to produce 82,000 acre feet or 76% during the same period.

WATER SUPPLY OUTLOOK expressed as "Poor", "Fair", "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Aldridge Ditch (Tony Creek)	Spring peak flows are past.	Fair
Badger Creek		Fair
Dee Irrigation District		Fair
East Fork Irrig. Dist.		Fair
Farmers Irrigation Dist.		Fair
Hood River Irrig. Dist.		Fair
Juniper Flat		Fair
Middle Fork Irrig. Dist.		Fair
Mile Creeks		Fair
Mill Creek		Fair
Mount Hood Irrig. Dist.		Fair
Rock-Gate-Threemile Crs.		Fair
Tygh Creek		Fair
White River		Fair

RESERVOIR STORAGE (1,000 Ac. Ft.) June 1, 1967

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Clear Lake	11.9	3.4	4.3	- -

STREAMFLOW FORECASTS^a(1,000 Ac. Ft.) as of June 1, 1967

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT. OF AVERAGE ⁱ
NO.	NAME				
1210	Hood near Hood River ^d	192	May-July	218	88
		250	May-Sept.	278	90
1185	Hood, West Fork near Dee	89	May-July	101	88
		108	May-Sept.	125	86
1015	White below Tygh Valley	82	May-July	108	76
		98	May-Sept.	126	78

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	ELEVATION				LAST YEAR	1948-62 AVERAGE
Clear Lake	3500	5/26	0	0.0	0.0	- -
Clear Lake Experimental	3500	5/26	0	0.0	0.0	- -
Phlox Point	5400	5/26	96	51.4	36.2	45.3 ^m
Still Creek	3670	5/26	2	0.7	2.5	0.9 ^m
Umbrella Falls	5400	6/1	97	45.3	- -	- -

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

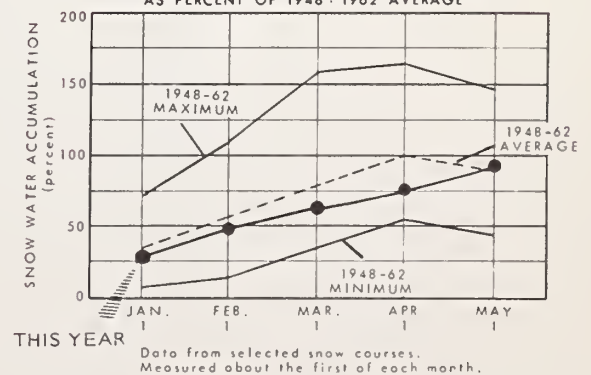
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS



LEGEND

- Watershed Boundary
- - - Sub-watershed Boundary
- - - Soil Conservation District Bdry.
- - - County Boundary
- ▲ Forecast Point
- Snow Course
- † Aerial Snow Depth Gage
- ▼ Soil Moisture Station
- ⊥ Precipitation Gage
- ⊓ Temperature Gage
- ⚡ Radio Telemetry

SNOW WATER ACCUMULATION IN AREA 6 AS PERCENT OF 1948-1962 AVERAGE



Hood, Mile Creeks, Lower Deschutes Watersheds

WATER SUPPLY OUTLOOK LOWER COLUMBIA WATERSHEDS OREGON

as of

June 1, 1967

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

GENERAL OUTLOOK

May was generally a cool and dry month in the Columbia Basin. Basin-wide, temperature averaged 2 degrees below normal. Precipitation was below average over most of the basin except in the Upper Columbia portion in British Columbia and a few stations in Western Montana where slightly above average amounts were recorded. Snowmelt flow for May was substantially less than anticipated because of the cool temperature and generally below average precipitation. As a result, a very large volume of runoff is yet to come from the Upper Columbia Basin. June flows are expected to be well above average. Except for a few minor tributaries, water supply for irrigation in the Upper Basin, the Snake, and in the Lower Basin will be excellent. The U. S. Weather Bureau River Forecast Center is forecasting probable stages of 22 to 24 feet on the Columbia at Vancouver, Washington with such regulation as is available.

SNOW COVER

Snow cover in excess of 140% of average remains in British Columbia, Northwest Montana, and in Central Idaho. The Upper Snake and the Washington Cascades have an above average snowpack in the 120-140% range. In Oregon and Northeast Washington the mountain snowpack is generally average, ranging from 80 to 120% of average. In general the remaining snowpack reflects the same conditions as existed on May 1. There has been a decline from the maximum snow cover of a month ago of about 25% at the highest elevations to about 50% at median elevations. The low elevation snowpack has disappeared.

STREAMFLOW

The flow of the Columbia has been below average for over a year except for Jan. 1967. The record by months for the 1967 water year for the Columbia at The Dalles is as follows:

<u>Month</u>	<u>Percent of Average Discharge (1948-62)*</u>
October	79 (Adjusted for storage)
November	80 (Adjusted for storage)
December	96 (Adjusted for storage)
January	109 (Adjusted for storage)
February	88 (Adjusted for storage)
March	80 (Adjusted for storage)
April	55 (Adjusted for storage)
May	81 (Adjusted for storage)

*Preliminary data furnished by Current Records Center, USGS, Portland, Oregon.

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE ⁱ
NO.	NAME				
1057	Columbia at The Dalles	114,000	May-Sept.	94,841	120

HISTORICAL DATA (Columbia River at The Dalles)

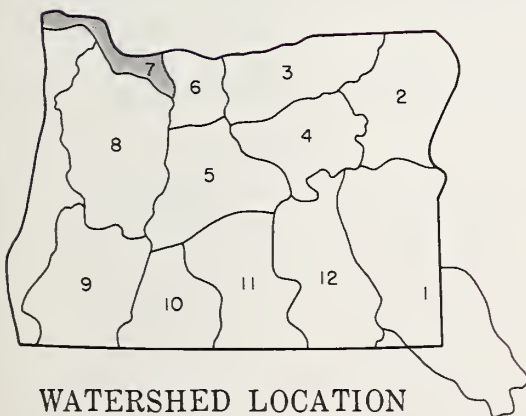
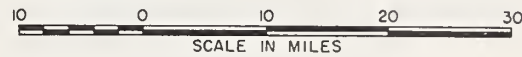
YEAR	STREAMFLOW ^d (1,000 A.F.)			PEAK (1,000 c.f.s.)	DATE
	APR. - SEPT.	APR. - JUNE	MAY - JUNE		
1943	115,000	75,300	52,400	541	June 21
1944	61,900	39,200	32,100	326	June 19
1945	81,600	54,600	47,300	505	June 8
1946	108,100	75,400	59,600	581	May 30
1947	100,300	70,000	56,800	536	May 11
1948	130,500	94,600	81,900	999	May 31
1949	95,700	71,400	56,000	622	May 18
1950	120,400	74,700	61,200	744	June 25
1951	113,000	75,600	59,100	597	May 26
1952	107,700	77,500	57,300	557	May 28
1953	100,600	64,900	55,800	609	June 17
1954	119,500	70,500	59,300	561	May 23
1955	99,500	58,300	50,300	545	June 26
1956	131,400	96,900	75,800	815	June 3
1957	105,700	80,500	67,200	700	May 22
1958	97,700	72,000	58,600	593	May 31
1959	112,500	71,900	58,900	555	June 23
1960	97,000	64,000	48,000	442	June 6
1961	101,400	74,400	64,000	699	June 8
1962	94,600	64,100	49,200	460	June 5
1948-62 Avg.	108,500	74,100	60,200	633	
1963	87,000	56,300	46,200	437	June 18
1964	109,020	70,739	61,313	662	June 18

LOWER COLUMBIA RIVER FLOOD STAGES (with 9.5' tide at Astoria)

VANCOUVER GAGE (Weather Bu.)	FLOW AT THE DALLES (1,000 c.f.s.)	DRAINAGE DISTRICT PUMPHOUSE						
		SANDY	SAUVIE ISL.	SCAPPOOSE	DEER ISL.	RAINIER	BEAVER	WOODSON
		RIVER MILES						
		118.9	96.0	91.0	77.0	62.0	52.0	47.0
35 (1894)	1210	41.2	34.2	33.3	28.5	21.9	17.5	15.5
34	1160	40.5	33.5	32.5	27.7	21.2	17.0	15.0
33	1100	39.6	32.4	31.4	26.7	20.2	16.1	14.3
32	1050	38.9	31.5	30.5	25.7	19.5	15.4	13.7
31 (1948)	1000	38.0	30.7	29.5	25.1	18.8	14.7	13.0
30	943	36.6	29.5	28.5	24.3	18.1	14.0	12.4
29	897	35.5	28.5	27.7	23.7	17.5	13.4	11.8
28	853	34.3	27.5	26.7	22.8	17.0	13.0	11.4
27 (1956)	811	33.0	26.5	25.6	21.8	16.2	12.5	11.0
26 (1950)	771	32.1	25.5	24.6	20.9	15.5	12.2	10.7
25	733	30.7	24.2	23.2	19.7	14.6	11.7	10.3
24	697	29.7	23.0	22.2	19.0	14.1	11.4	10.2
23	662	29.0	22.3	21.4	18.4	13.6	11.2	10.0
22	628	28.1	21.4	20.3	17.2	13.0	10.9	9.7
21	595	27.2	20.7	19.5	16.4	12.6	10.6	9.6
20 (1954)	564	26.2	19.8	18.6	15.5	12.1	10.2	9.4
19	534	25.5	19.2	18.0	15.0	11.8	10.0	9.3
18	501	24.4	18.3	17.2	14.3	11.4	9.8	9.1
17	479	23.4	17.4	16.4	13.7	11.0	9.6	8.9
16	452	22.4	16.5	15.5	13.0	10.5	9.3	8.7

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records.

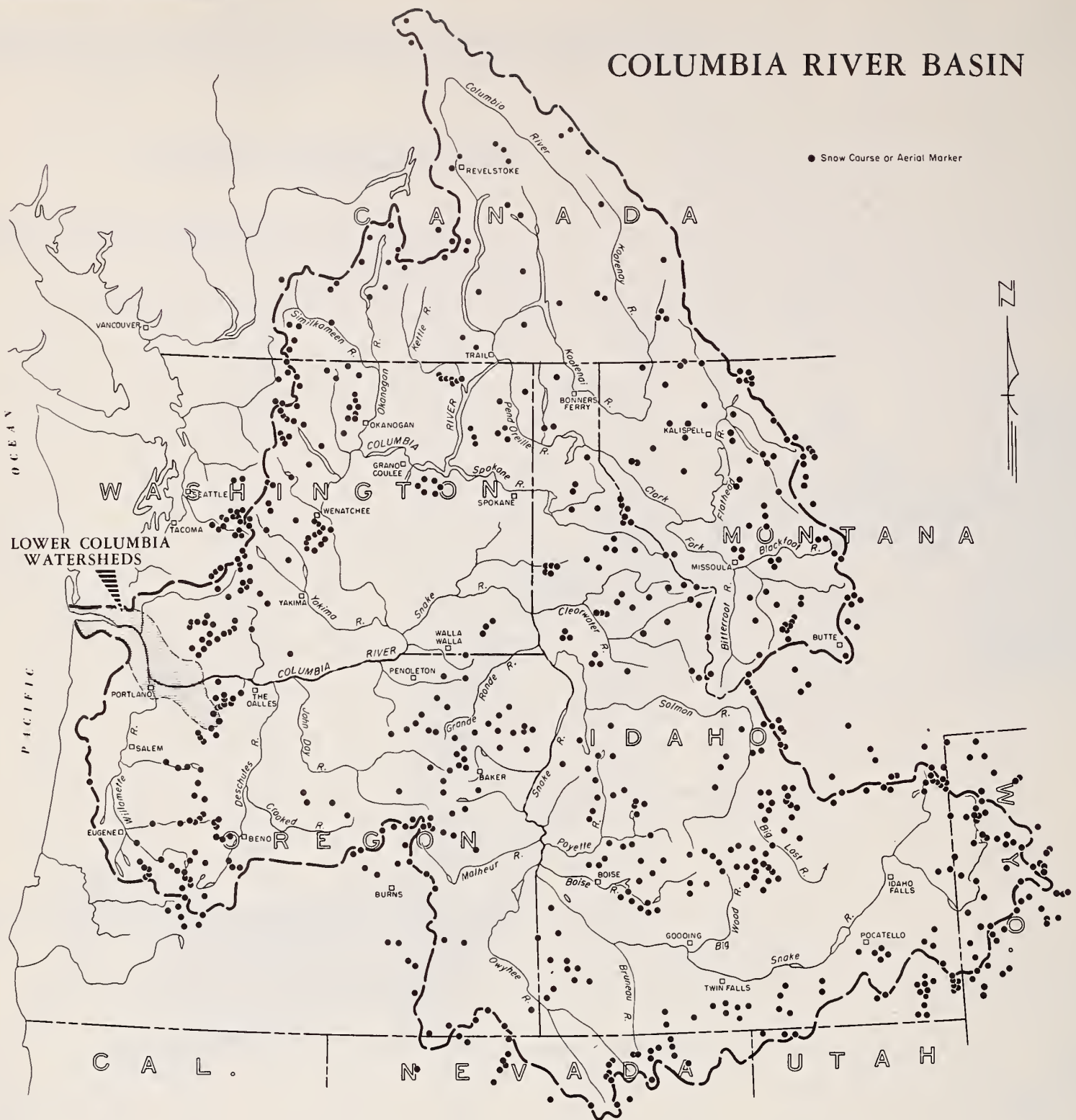
LOWER COLUMBIA WATERSHEDS



LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- (50) River Miles
- Snow Course
- 9 Temperature
- ⚡ Radio Telemetry

COLUMBIA RIVER BASIN





WATER SUPPLY OUTLOOK WILLAMETTE WATERSHEDS OREGON

as of

June 1, 1967

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

GENERAL OUTLOOK

Farmers and other water users in the Willamette Valley can expect nearly adequate water supplies this summer. There will be only a fair supply on lower elevation streams.

SNOW COVER

Snow cover remains only at the higher elevations but is more extensive than usual for June 1 conditions due to frequent cold periods.

SOIL MOISTURE

Moisture in the soil mantle on upper watersheds has continued to increase from snow melt and is currently much better than average.

RESERVOIR STORAGE

The Willamette Valley multiple purpose reservoirs are all storing close to average June 1 amounts.

STREAMFLOW

April-July expected flows in the Willamette Valley are as follows:

<u>Stream</u>	<u>Volume</u>	<u>Percent of 1948-62 Average</u>
Clackamas R. at Estacada	695,000	90
N. Santiam at Mehama	725,000	82
S. Santiam at Waterloo	535,000	84
McKenzie R. nr. Vida	1,000,000	87
Md. Fk. Willamette	735,000	85
Row River nr. Dorena	122,000	113
Willamette at Salem	4,100,000	81

WATER SUPPLY OUTLOOK

expressed as "Poor", "Fair",
"Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Calapooya	Spring peak flows are past.	Fair
Clackamas		Average
McKenzie		Average
Molalla		Fair
Santiam, North		Average
Santiam, South		Average
Willamette, Coast Fork		Average
Willamette, Middle Fork		Average

RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Cottage Grove	30.0*	29.1	20.3	28.7
Cougar	155.2*	127.1	143.7	- -
Detroit	299.9*	262.3	248.5	268.2 ^m
Dorena	70.5*	65.6	50.3	64.8 ^m
Fall Creek	115.0*	107.8	99.0	- -
Fern Ridge	94.2*	96.6	86.7	90.9
Hills Creek	200.0*	184.0	189.8	-- -
Lookout Point	337.2*	270.5	300.4	296.0 ^m
Timothy Lake	61.7	61.0	61.4	58.9 ^m

*Multiple purpose reservoir--space reserved primarily for flood control.

STREAMFLOW FORECASTS^a(1,000 Ac. Ft.) as of June 1, 1967

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE ⁱ
NO.	NAME				
2080	Clackamas at Big Bottom	142	April-July	150	95
		174	April-Sept.	184	94
2100	Clackamas at Estacada	695	April-July	770	90
		800	April-Sept.	890	90
2095	Clackamas above Three Lynx	550	April-July	584	94
		655	April-Sept.	683	96
1590	McKenzie at McKenzie Bridge	435	April-July	502	87
		575	April-Sept.	658	87
1625	McKenzie near Vida	1000	April-July	1144	87
		1215	April-Sept.	1392	87
2090	Oak Grove Fork above Power Intake	142	April-July	147	97
		185	April-Sept.	190	97
1545	Row near Dorena	122	April-July	108	113
		126	April-Sept.	112	112
1830	Santiam, North at Mehama ^d	725	April-July	884	82
		820	April-Sept.	991	83
1875	Santiam, South at Waterloo	535	April-July	637	84
		565	April-Sept.	675	84
1480	Willamette, Mid. Fk. blw. N. Fk. nr. Oakridge ^d	735	April-July	863	85
		830	April-Sept.	968	86
1910	Willamette at Salem ^d	4100	April-July	5040	81
		4600	April-Sept.	5566	83

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WILLAMETTE WATERSHEDS

LEGEND

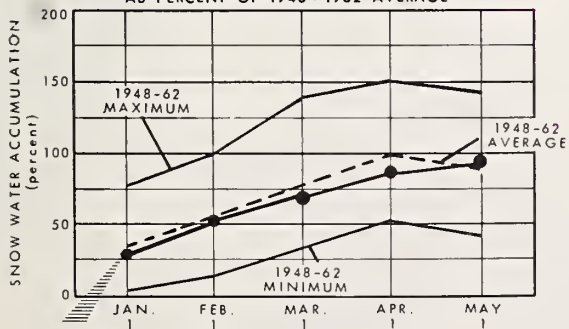
- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- ▲ Forecast Point
- Snow Course
- ⚡ Radio Telemetry
- ⊥ Precipitation Gage
- ⊥ Temperature Gage



10 0 10 20 30
SCALE IN MILES



SNOW WATER ACCUMULATION IN AREA 8 AS PERCENT OF 1948-1962 AVERAGE



THIS YEAR
Data from selected snow courses.
Measured about the first of each month

Willamette Watersheds

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	ELEVATION				LAST YEAR	1948-62 AVERAGE
Cascade Summit	4880	5/31	26	10.9	0.0	7.8 ^m
Cascade Summit (Alternate)	4880	5/31	25	10.5	- -	- -
Clear Lake	3500	5/26	0	0.0	0.0	- -
Clear Lake Experimental	3500	5/26	0	0.0	0.0	- -
Detroit Town	1610	6/1	0	0.0	0.0	- -
Detroit Dam	1580	6/1	0	0.0	0.0	- -
Hogg Pass	4755	6/1	54	25.7	17.2	- -
Marion Forks	2730	6/1	0	0.0	0.0	- -
McCredie Springs	2120	5/31	0	0.0	0.0	- -
Meridian Dam	750	5/31	0	0.0	0.0	- -
Mill City	826	6/1	0	0.0	0.0	- -
Oakridge	1310	5/31	0	0.0	0.0	- -
Phlox Point	5400	5/26	96	51.4	36.2	45.3 ^m
Railroad Overpass	2750	5/31	0	0.0	0.0	- -
Salt Creek Falls	4000	5/31	0	0.0	0.0	- -
Santiam Junction	3990	6/1	0	0.0	0.0	- -
Still Creek	3670	5/26	2	0.7	2.5	0.9 ^m
Waldo Lake	5500	5/25	50	23.2	- -	- -
Whitewater Bridge	2175	6/1	0	0.0	0.0	- -
RADIO REPORT BY AUTOMATIC-SNOW-MEASURING STATION						
			Time			
Peavine Ridge	3500	6/1	8:01 A.M.	0.0	0.0	- -
Phlox Point	5400	6/6	1:24 P.M.	50.7	43.6	- -



WATER SUPPLY OUTLOOK ROGUE, UMPQUA, WATERSHEDS OREGON

as of

June 1, 1967

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

GENERAL OUTLOOK

Farmers and other water users in the Umpqua and Rogue basins can expect average water supplies this summer. Streamflow during May was very good with the Rogue producing flows 114% of average at Raygold.

SNOW COVER

Snow cover remains only at the higher elevations but is more extensive than usual for June 1 conditions due to frequent cold periods.

Precipitation during May ranged from 45 to 81% of average in the area.

SOIL MOISTURE

Moisture in the soil mantle on upper watersheds has continued to increase from snow-melt and is currently much better than average.

RESERVOIR STORAGE

Hyatt Prairie's June 1 contents were 16,200 acre feet which is 116% of average. Howard Prairie, containing 57,400 acre feet is nearly full as is Emigrant Lake which on June 1 contained 38,100 acre feet or 109% of the average. Reservoir storage is excellent.

STREAMFLOW

Forecasts of expected summer streamflow are as follows:

<u>Stream</u>	<u>Volume (acre feet)</u>	<u>Percent of 1948-62 Average</u>
N. Umpqua blw. Lemolo Res.	180,000 April-Sept.	97
Rogue abv. Prospect	205,000 May-July	97
Rogue blw. South Fork	443,000 May-July	100
Rogue at Raygold	572,000 May-July	101
Applegate nr. Copper	147,000 April-Sept.	104
Illinois nr. Kerby	210,000 April-Sept.	99

Report prepared by
W.T. FROST AND TOM GEORGE
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

WATER SUPPLY OUTLOOK

expressed as "Poor", "Fair",
"Average" or "Excellent"

RESERVOIR STORAGE (1,000 Ac. Ft.)

June 1, 1967

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Althouse Creek	Spring peak flows are past.	Fair
Applegate River, Big		Average
Applegate River, Little		Average
Ashland Creek		Average
Butte Creek, Big		Average
Butte Creek, Little		Average
Cow Creek		Fair
Deer Creek		Fair
Elk Creek		Fair
Emigrant Creek (abv. Res.)		Average
Evans Creek		Fair
Gold Hill Irrigation Dist.		Average
Grants Pass Irrig. Dist.		Average
Grave Creek		Fair
Illinois River, East Fork		Average
Illinois River, West Fork		Average
Jump-off-Joe Creek		Fair
Neil Creek		Average
Red Blanket Creek		Average
Rogue River		Average
Sucker Creek		Fair
Table Rock Irrig. Dist.		Average
Thompson Creek		Fair
Wagner Creek		Average
Williams Creek		Fair

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Emigrant Gap	39.0	38.1	31.2	35.1*
Fish Lake	7.8	5.8	6.2	7.0
Fourmile Lake	16.1	b		
Howard Prairie	60.0	57.4	50.7	- -
Hyatt Prairie	16.1	16.2	14.7	14.0
*Average for years of record after reconstruction.				

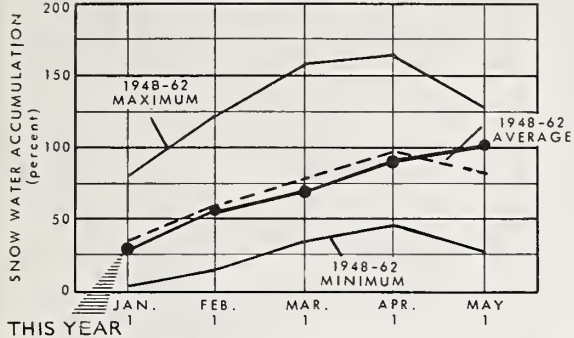
STREAMFLOW FORECASTS^a(1,000 Ac. Ft.) as of June 1, 1967

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT. OF AVERAGE ⁱ
NO.	NAME				
3620	Applegate near Copper	147	April-Sept.	142	104
3145	Clearwater above Trap Creek ^d	60	May-Sept.	62	97
5045	Fourmile Lake net Inflow ^d	6.7	April-Sept.	6.6	101
5140	Hyatt Reservoir net Inflow ^d	3.3	May-Sept.	3.4	97
3770	Illinois River at Kerby	205	April-July	206	100
		210	April-Sept.	212	99
3425	Little Butte, N. Fk. at Fish Lk. nr. Lake Cr. ^d	*	April-Sept.	16.0	
3415	Little Butte, So. Fk. nr. Lake Creek	*	April-July	38	
	Note: Minimum flow will drop to 100 c.f.s. by *.				
3280	Rogue above Prospect	205	May-July	212	97
		263	May-Sept.	272	97
3320	Rogue, South Fork near Prospect ^d	50	May-July	52	97
		62	May-Sept.	64	97
3350	Rogue River below South Fork	443	May-July	443	100
		585	May-Sept.	586	100
3590	Rogue at Raygold near Central Point	572	May-July	567	101
		737	May-Sept.	730	101
3615	Rogue at Grants Pass	680	May-Sept.	700	97
3135	Umpqua, No. blw. Lemolo Res. nr. Toketee Falls ^d	180	April-Sept.	186	97
*Snow survey information at Fish Lake not available.					

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

SNOW WATER ACCUMULATION IN AREA 9

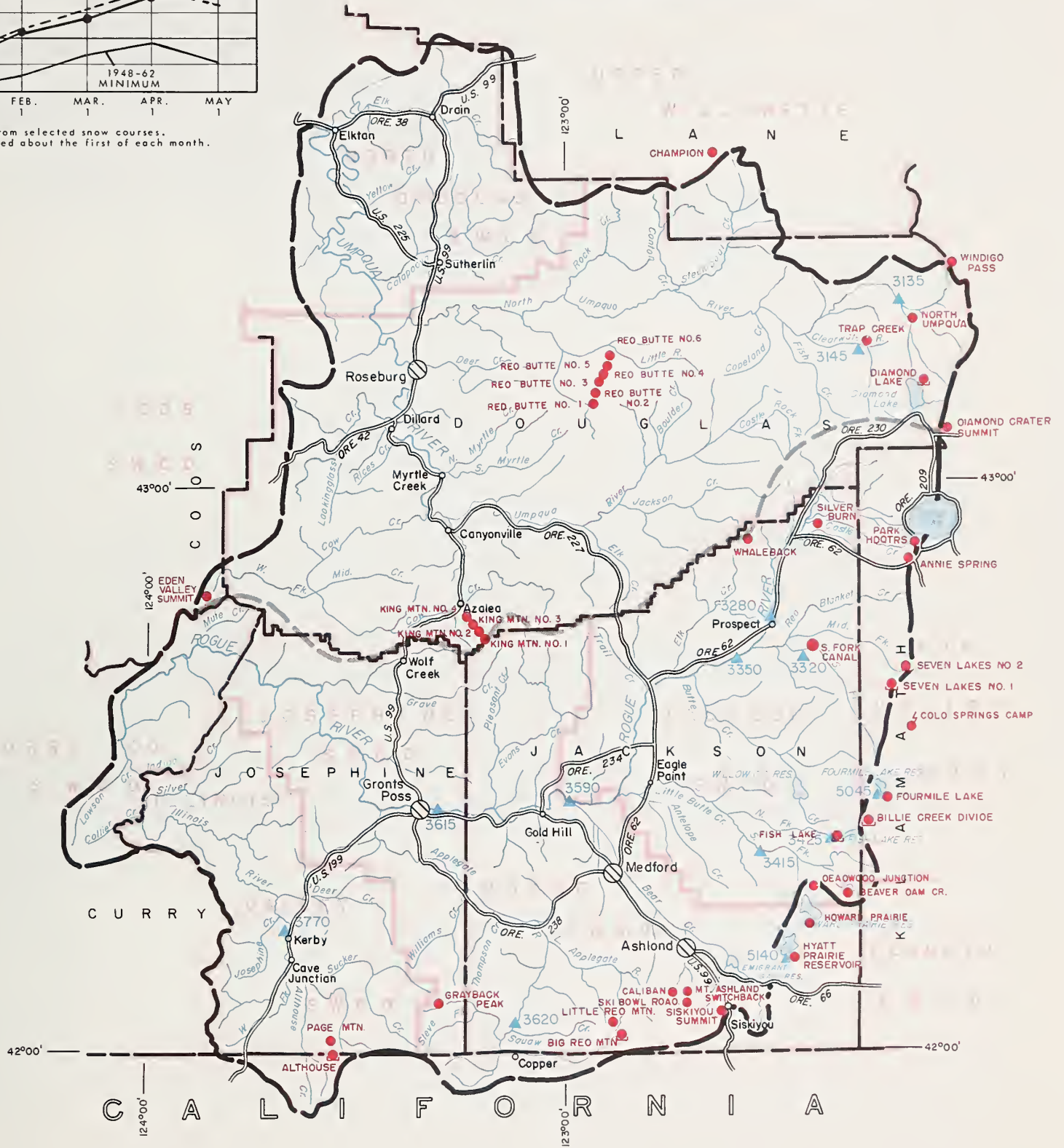
AS PERCENT OF 1948-1962 AVERAGE



THIS YEAR
Data from selected snow courses.
Measured about the first of each month.

ROGUE, UMPQUA WATERSHEDS

10 0 10 20 30
SCALE IN MILES



LEGEND

- Watershed Boundary
- - - Sub-watershed Boundary
- Soil Conservation District Bdry
- County Boundary
- ▲ Forecast Point
- Snow Course
- ⌋ Precipitation Gage
- ⚡ Radio Telemetry

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
					LAST YEAR	1948-62 AVERAGE
NAME	ELEVATION					
Billie Creek Divide	5300	5/26	0	0.0 ^j	0.0	--
Diamond-Crater Summit	5800	5/26	33	15.7	7.8	--
Diamond Lake	5315	5/26	10	4.4	0.8	--
Red Butte #1	4560	5/24	T	T	0.0	--
Red Butte #2	4000	5/24	0	0.0	0.0	--
Red Butte #3	3500	5/24	0	0.0	0.0	--
Red Butte #4	3000	5/24	0	0.0	0.0	--
Red Butte #5	2500	5/24	0	0.0	0.0	--
Red Butte #6	2000	5/24	0	0.0	0.0	--

"The Conservation of Water begins with the Snow Survey"



WATER SUPPLY OUTLOOK KLAMATH WATERSHEDS OREGON

as of

June 1, 1967

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

GENERAL OUTLOOK

Farmers, ranchers and other water users in the Klamath Basin can expect excellent water supplies this summer. Streamflow during May was excellent with the inflow to Klamath Lake running about 128% of average. Inflows to Gerber and Clear Lake were also way above average.

SNOW COVER

Most of the snow cover is now gone with only the highest elevations still reporting any snow. Precipitation for May was above average with Klamath Falls reporting 127% of normal.

SOIL MOISTURE

Moisture in the soil mantle on the upper water sheds has continued to increase from snow melt and is now much above average.

RESERVOIR STORAGE

Upper Klamath storage on June 1 was 560,200 acre feet or 103% of average. Gerbers contents on June 1 were 81,800 acre feet or 144% average while Clear Lake contained 258,900 acre feet which was 104% of average.

STREAMFLOW

Forecasts of expected May-September streamflows are as follows:

<u>Stream</u>	<u>Volume</u>	<u>Percent of 1948-62 Average</u>
Clear Lake Resv. Inflow	43,300 acre feet	249
Gerber Resv. Inflow	13,900 acre feet	224
Sprague nr. Chiloquin	247,000 acre feet	130
Upper Klamath Lake net Inflow	527,000 acre feet	120
Williamson blw. Sprague	400,000 acre feet	119

WATER SUPPLY OUTLOOK

expressed as "Poor", "Fair"
"Average" or "Excellent"

RESERVOIR STORAGE (1,000 Ac. Ft.) June 1, 1967

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Ft. Klamath Valley	Spring peak flows are past.	Excellent
Lost River (Clear Lake)		Excellent
Lost River (Gerber)		Excellent
Lost River (Willow Res.)		Excellent
Sprague River		Excellent
Upper Klamath Lake		Excellent
Williamson River		Excellent

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Clear Lake	440.2	258.9	230.4	249.2
Gerber	94.0	81.8	61.9	56.7
Upper Klamath Lake	584.0	560.2	500.4	541.4

STREAMFLOW FORECASTS^a(1,000 Ac. Ft.) as of June 1, 1967

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE ⁱ
NO.	NAME				
823	Clear Lake Reservoir Inflow ^k	43.3	May-Sept.	17.4	249
8215	Gerber Reservoir Inflow ^k	13.9	May-Sept.	6.2	224
5010	Sprague near Chiloquin	247	May-Sept.	190	130
5070	Upper Klamath Lake net Inflow ^k	527	May-Sept.	438	120
5025	Williamson below Sprague River	400	May-Sept.	336	119

SOIL MOISTURE

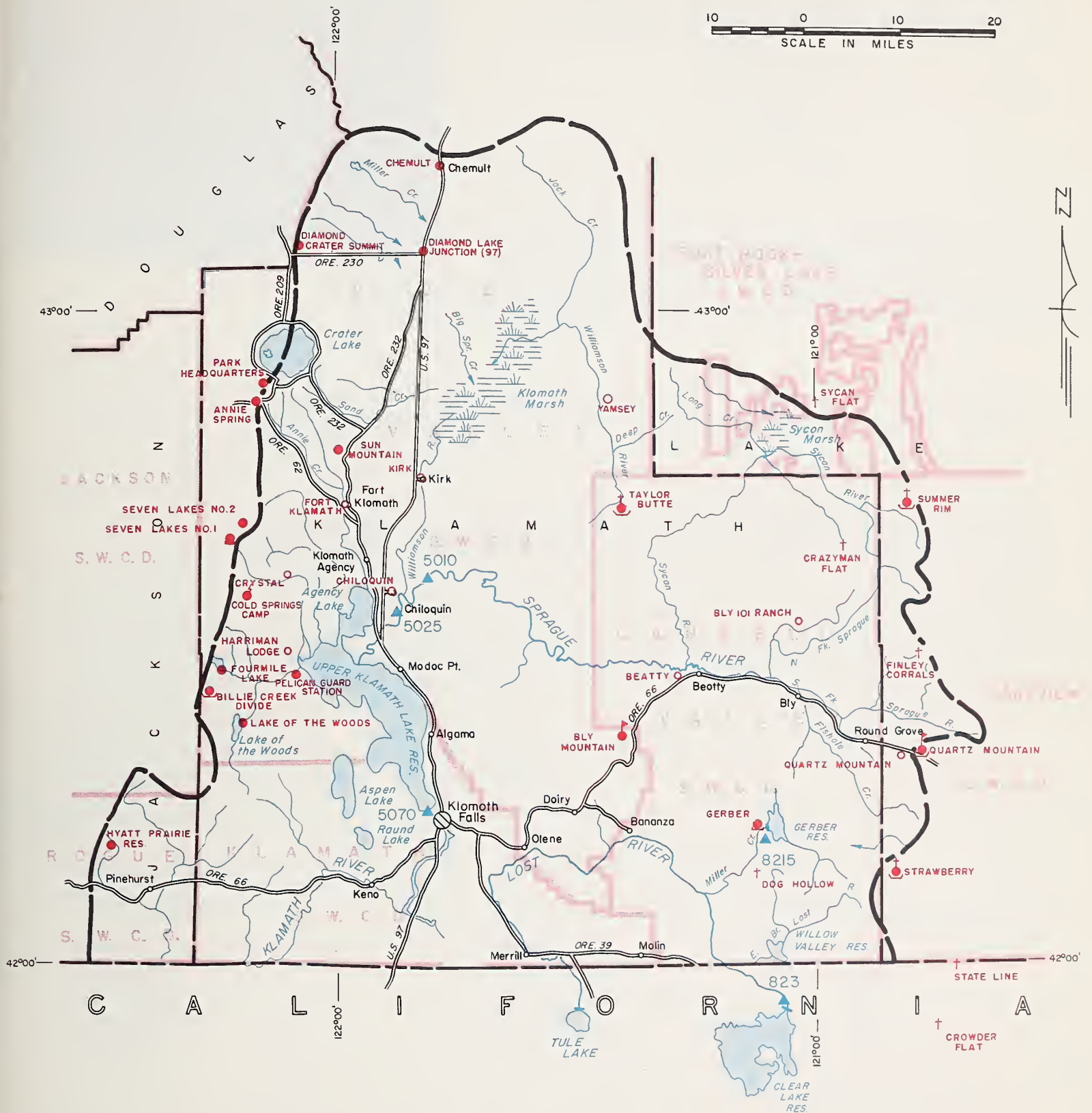
STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
		DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Bly Mountain	5090	42	14.0	5-29-67	12.4	10.5	12.5 ^f

SNOW

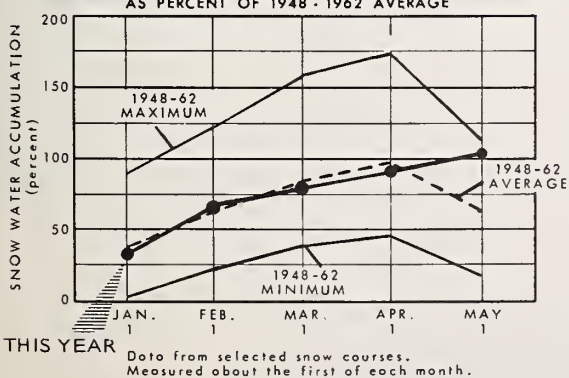
SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	ELEVATION				LAST YEAR	1948-62 AVERAGE
Billie Creek Divide	5300	5/26	0	0.0 ^j	0.0	--
Bly Mountain	5090	5/29	0	0.0	--	--
Diamond-Crater Summit	5800	5/26	33	15.7	7.8	--
Diamond Lake Junction (97)	4600	5/26	0	0.0	0.0	--
Quartz Mountain	5320	5/29	0	0.0	0.0	--
Quartz Mountain (PP&L)	5504	5/29	0	0.0	0.0	--
Sun Mountain	5350	5/26	28	13.4	0.5	--

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

KLAMATH WATERSHEDS



SNOW WATER ACCUMULATION IN AREA 10
AS PERCENT OF 1948-1962 AVERAGE



LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- Forecast Point
- Snow Course
- Aerial Snow Depth Gage
- COPCO Snow Station
- Soil Moisture Station
- Precipitation Gage
- Radio Telemetry

WATER SUPPLY OUTLOOK LAKE COUNTY, GOOSE LAKE WATERSHEDS OREGON

as of

June 1, 1967



U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

GENERAL OUTLOOK

Excellent water supplies are expected for most Lake County ranchers and other water users this summer. Streamflow during May was well above average filling both Drews and Cottonwood reservoirs.

SNOW COVER

Most of the snow cover is now gone having melted rapidly during the month and producing high flows. Precipitation in the area last month ranged from 63 to 96% of average.

SOIL MOISTURE

Moisture in the soil mantle on the upper watersheds is above average for this time of year due to the late snow melt.

RESERVOIR STORAGE

Drews reservoir on June 1 contained 70,000 acre feet and was spilling as was Cottonwood which held 8,700 acre feet.

STREAMFLOW

Forecasts of expected April-September forecasts are as follows:

<u>Stream</u>	<u>Volume (acre feet)</u>	<u>Percent of 1948-62 Average</u>
Chewaucan nr. Paisley	114,000	130
Deep abv. Adel	85,000	118
Drew Resv. net Inflow	27,000 May- Sept.	237
Honey Cr. nr. Plush	19,100	119
Twentymile nr. Adel	26,000	118

WATER SUPPLY OUTLOOK

expressed as "Poor", "Fair",
"Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Chewaucan	Spring peak flows are past.	Excellent
Crooked Creek		Excellent
Deep Creek		Excellent
Dry Creek		Average
East Side Goose Lake		Average
Guano Lake		Fair
Honey Creek		Excellent
Lakeview Water Users Assn.		Excellent
Rock Creek (Hart Mtn.)		Fair
Silver-Buck Creeks		Average
Summer Lake		Excellent
Thomas Creek		Excellent
Twentymile Creek		Average
Warner Lakes		Average

RESERVOIR STORAGE (1,000 Ac. Ft.) June 1, 1967

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Cottonwood	8.7	8.7	3.1	6.0*
Drews	63.0	70.0	54.3	52.5
Thompson Valley	17.4	b		
*Average for years of record after reconstruction.				

STREAMFLOW FORECASTS^a(1,000 Ac. Ft.) as of June 1, 1967

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT. OF AVERAGE ⁱ
NO.	NAME				
3840	Chewaucan near Paisley	103	April-June	79	130
		114	April-Sept.	88	130
3715	Deep above Adel	80	April-June	68	118
		85	April-Sept.	72	118
3385	Drews Reservoir net Inflow ^d	27	May-Sept.	11.4	237
3785	Honey near Plush	18.6	April-June	15.6	119
		19.1	April-Sept.	16.1	119
3660	Twentymile near Adel	25	April-June	21	119
		26	April-Sept.	22	118

SOIL MOISTURE

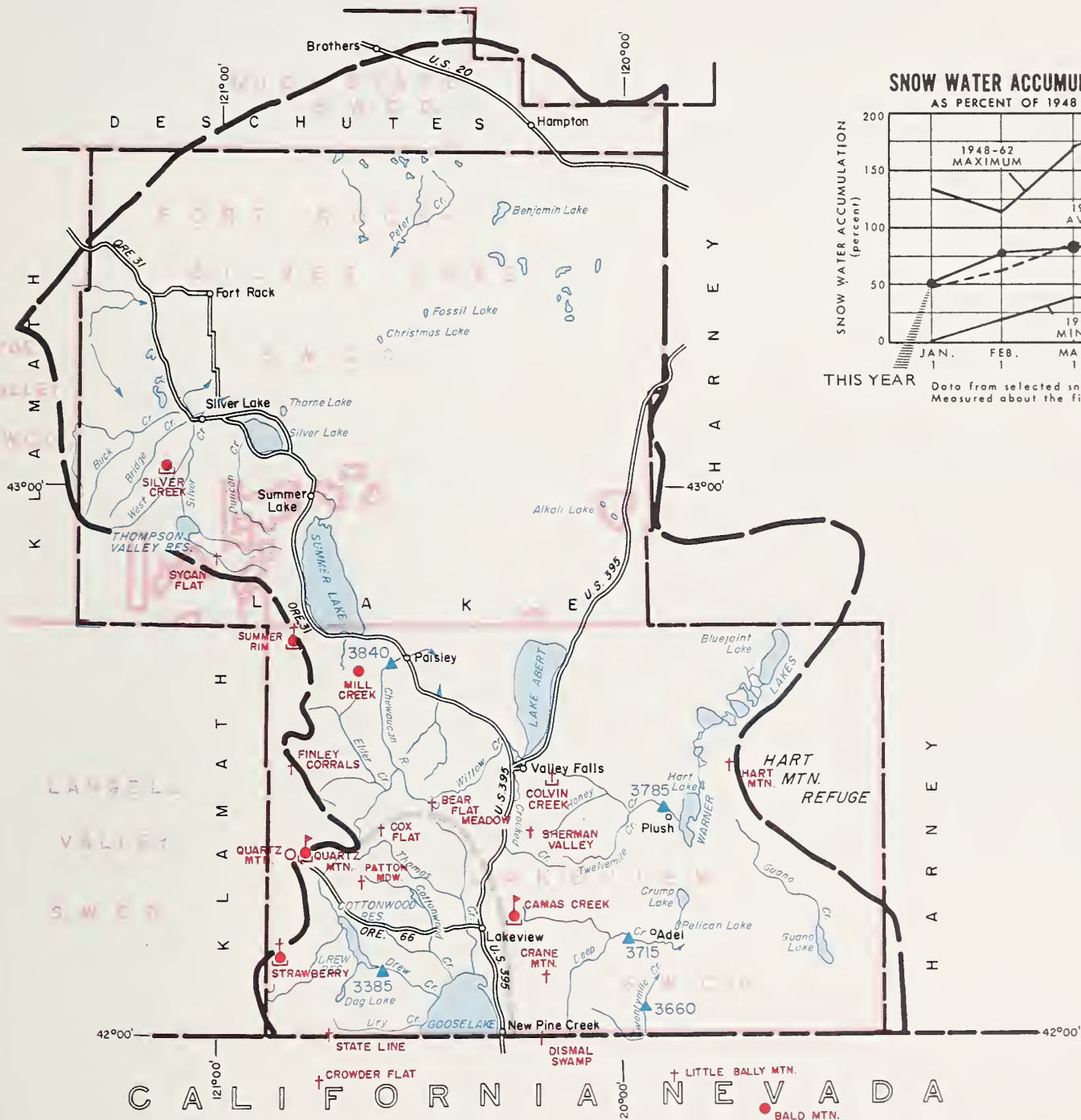
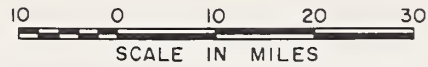
STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
		DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Camas Creek							
	5720	42	14.5	6-5-67	12.9	11.2	12.8
Quartz Mountain							
	5320	48	15.3	5-29-67	9.4	8.9	10.2

SNOW

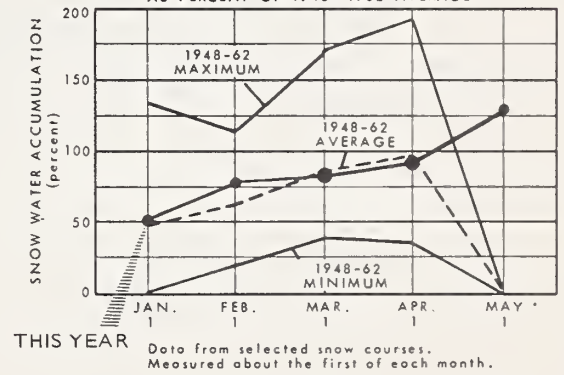
SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	ELEVATION				LAST YEAR	1948-62 AVERAGE
Quartz Mountain	5320	5/29	0	0.0	0.0	- -
Quartz Mountain (PP&L)	5504	5/29	0	0.0	0.0	- -

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

LAKE COUNTY, GOOSE LAKE WATERSHEDS



SNOW WATER ACCUMULATION IN AREA 11
AS PERCENT OF 1948 - 1962 AVERAGE



LEGEND

- Watershed Boundary
- - - Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- ▲ Forecast Point
- Snow Course
- † Aerial Snow Depth Gage
- COPCO Snow Station
- ◊ Soil Moisture Station
- ⌈ Precipitation Gage

WATER SUPPLY OUTLOOK HARNEY BASIN WATERSHEDS OREGON

as of

June 1, 1967



U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

GENERAL OUTLOOK

Average to excellent water supplies are expected for Harney County ranchers and other water users this summer.

SNOW COVER

Most of the snow cover is now gone having melted rapidly during the month and producing good flows. Precipitation in the area during May was close to 75% of average.

SOIL MOISTURE

Moisture in the soil mantle of the upper watersheds continued to increase as a result of snowmelt and is well above average.

STREAMFLOW

The Donner und Blitzen nr. Frenchglen is expected to produce 79,000 acre feet or 127% of the average for April-Sept. Trout Cr. near Denio should produce 11,000 acre feet during April-September or 131%. 90,000 acre feet which is 91% of average should flow past the Burns gaging station on the Silvies River during the April-September period while 21,000 acre feet or 95% of average is expected from Silver Creek nr. Riley for April-July.

WATER SUPPLY OUTLOOK

expressed as "Poor", "Fair"
"Average" or "Excellent"

RESERVOIR STORAGE (1,000 Ac. Ft.) June 1, 1967

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Catlow Valley	Spring peak flows are past.	Fair
Cow Creek		Fair
Donner und Blitzen River		Excellent
Mill-Coffeepot Creeks		Average
Rattlesnake Creek		Average
Silver Creek		Average
Silvies River		Average
Soldier-Prather Creek		Average
Trout Creek		Excellent
Whitehorse Creek		Average

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE

STREAMFLOW FORECASTS^a(1,000 Ac. Ft.) as of June 1, 1967

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE ⁱ
NO.	NAME				
3960	Donner und Blitzen near Frenchglen	65	April-June	52	125
		79	April-Sept.	62	127
4030	Silver near Riley	21	April-July	22	95
3935	Silvies near Burns	87	April-June	96	90
		90	April-Sept.	99	91
4065	Trout near Denio	10.0	April-June	7.4	135
		11.0	April-Sept.	8.4	131

SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
		DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
NAME	ELEVATION						
Blue Mountain Springs	5900	42	16.9	5-29-67	13.1	11.4	13.5
Fish Creek	7900	48	15.0	b			
Folly Farm	4450	30	12.5	b			
Silvies	6900	48	16.4	b			
Snow Mountain	6300	48	16.7	6-2-67	16.7	16.4	16.6
Starr Ridge	5150	36	10.6	5-29-67	10.4	9.0	10.4
Stinking Water Summit	4800	48	21.9	c			
Willow-Bald	5000	24	6.6	6-2-67	6.4	4.6	6.2

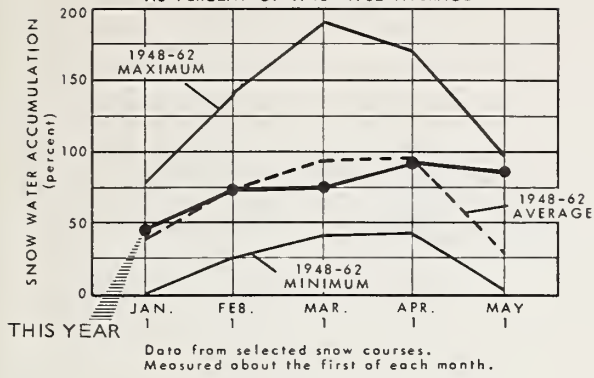
SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	ELEVATION				LAST YEAR	1948-62 AVERAGE
Delintment Lake	5600	6/2	0	0.0 ^j	--	--
Snow Mountain	6300	6/2	0	0.0 ^j	--	--

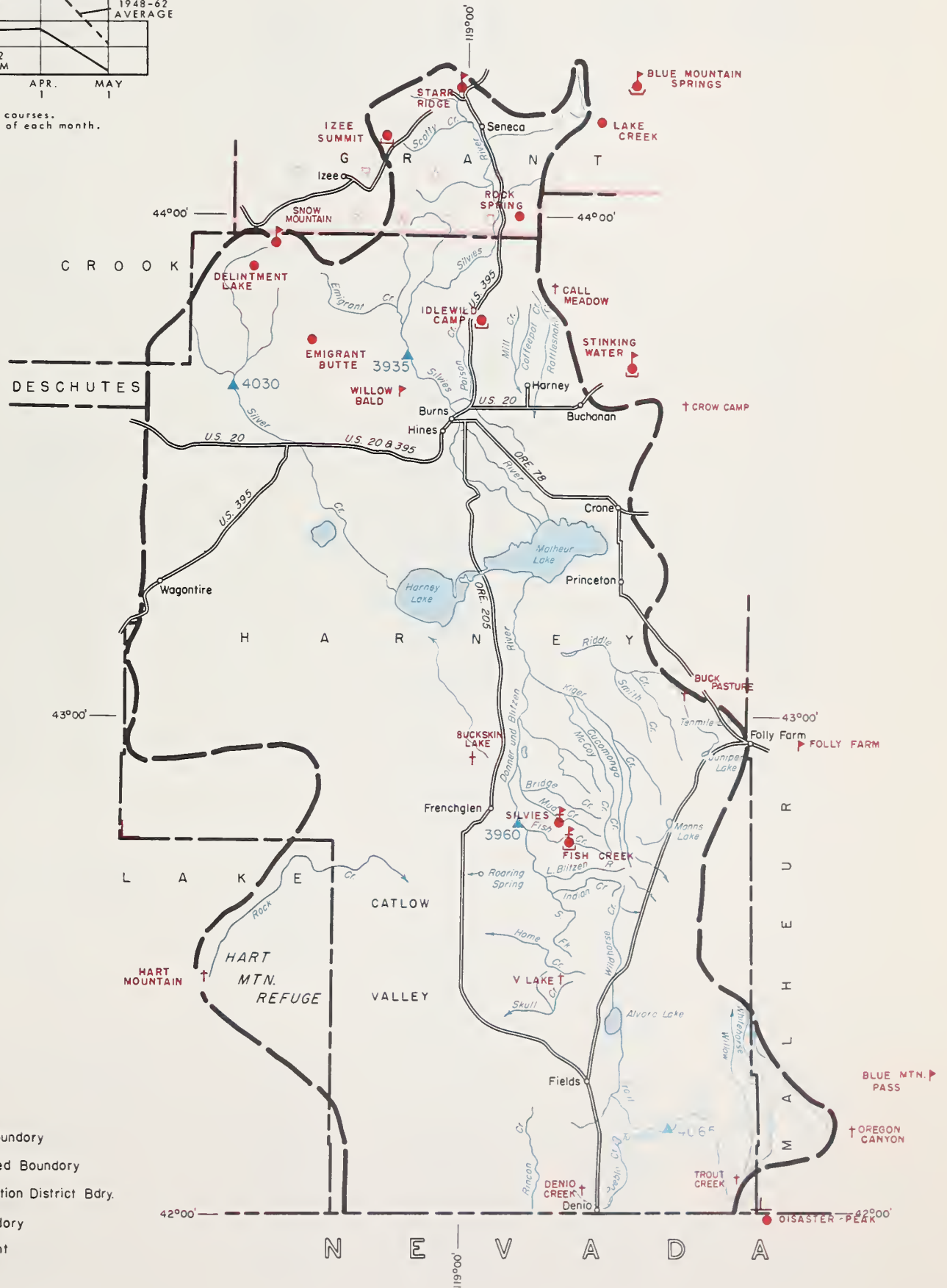
(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

HARNEY BASIN WATERSHEDS

SNOW WATER ACCUMULATION IN AREA 12
AS PERCENT OF 1948-1962 AVERAGE



10 0 10 20 30
SCALE IN MILES



LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdy.
- County Boundary
- Forecast Point
- Snow Course
- Aerial Snow Depth Gage
- Soil Moisture Station
- Precipitation Gage

PREVIOUSLY UNPUBLISHED OREGON SNOW SURVEY DATA
1966-67 Season

<u>SNOW COURSE Name</u>	<u>No.</u>	<u>Date</u>	<u>Depth (In.)</u>	<u>Water (In.)</u>
Buck Pasture	18F6a	4/13/67	0	0.0
Buckskin Lake	18G8a	4/13/67	0	0.0
Bully Creek	18G21a	4/13/67	T	T
Call Meadows	18F7a	4/13/67	6	1.4
Cascade Summit	22F3	1/16/67	46	15.0
		2/15/67	77	22.4
		3/14/67	86	26.8
		4/14/67	85	29.8
Cascade Summit (Alternate)	22F29	12/30/66	32	9.8
		1/16/67	44	13.2
		1/30/67	61	19.6
		2/15/67	78	23.4
		2/28/67	68	23.2
		3/14/67	83	26.3
		3/30/67	87	28.8
		4/14/67	80	27.8
		4/28/67	80	31.5
Champion	22F9	1/16/67	35	12.6
		2/16/67	66	20.7
		3/16/67	73	28.8
		4/14/67	84	31.3
Cold Springs Camp	22G24	11/30/66	13	2.9
Cooper Spur	21D25	12/15/66	11	2.9
		1/16/67	16	4.6
		2/15/67	23	6.3
		3/15/67	22	7.0
Cottonwood-Indian	17F2a	4/13/67	T	T
Crane Prairie	18E19	4/28/67	20	6.9
Crow Camp	18F8a	4/13/67	T	T
Denio Creek	18G6a	4/13/67	0	0.0

<u>SNOW COURSE Name</u>	<u>No.</u>	<u>Date</u>	<u>Depth (In.)</u>	<u>Water (In.)</u>
Detroit City	22E1	1/13/67	0	0.0
		2/15/67	T	T
		3/15/67	0	0.0
		4/14/67	0	0.0
		5/15/67	0	0.0
Detroit Dam	22E2	1/13/67	0	0.0
		2/15/67	T	T
		3/15/67	0	0.0
		4/14/67	0	0.0
		5/15/67	0	0.0
Fish Creek	18G2a	4/13/67	69	24.8
Flag Prairie	18E26a	4/13/67	T	T
Golden Curry	22F10	1/16/67	T	T
		2/16/67	17	2.8
		3/16/67	11	4.0
		4/14/67	6	0.7
Goodrich Lake	18E6	12/30/66	54	13.4
Hogg Pass	21E6	1/13/67	61	19.1
		2/15/67	97	31.0
		3/15/67	102	37.5
		4/14/67	108	43.7
		5/15/67	87	39.9
King Mountain #3	23G10	1/27/67	15	4.0
King Mountain #4	23G11	1/27/67	0	0.0
King Mountain #5	23G12	1/27/67	0	0.0
King Mountain #6	23G13	1/27/67	0	0.0
Lake of The Woods	22G15	1/17/67	16	5.0
		2/14/67	23	5.0
		3/14/67	30	9.0
		4/14/67	27	8.4
Layng Creek R.S.	22F13	1/16/67	0	0.0
		2/16/67	0	0.0
		3/16/67	0	0.0
		4/14/67	0	0.0
Lookout Butte	17G6a	4/13/67	0	0.0
Logan Valley	18E22a	4/13/67	8	2.2

<u>SNOW COURSE Name</u>	<u>No.</u>	<u>Date</u>	<u>Depth (In.)</u>	<u>Water (In.)</u>
Louse Canyon	17G4a	4/13/67	4	1.4
Lund Park	22F12	1/16/67	0	0.0
		2/16/67	0	0.0
		3/16/67	0	0.0
		4/14/67	0	0.0
Marion Forks	21E4	1/13/67	16	5.9
		2/15/67	39	10.5
		3/15/67	39	13.3
		4/14/67	23	8.9
		5/15/67	0	0.0
McCredie Springs	22F6	1/16/67	0	0.0
		2/16/67	0	0.0
		3/14/67	0	0.0
		4/14/67	0	0.0
Meridian Dam	22F8	1/16/67	0	0.0
		2/16/67	0	0.0
		3/14/67	0	0.0
		4/14/67	0	0.0
Mill City	22E3	1/13/67	0	0.0
		2/15/67	0	0.0
		3/15/67	0	0.0
		4/14/67	0	0.0
		5/15/67	0	0.0
Oakridge	22F7	1/16/67	0	0.0
		2/16/67	0	0.0
		3/14/67	0	0.0
		4/14/67	0	0.0
Oregon Canyon	17G5a	4/13/67	20	7.0
Parkdale	21D23	12/15/66	T	T
		1/16/67	0	0.0
		2/15/67	3	0.3
		3/15/67	0	0.0
Quartz Mountain	20G6	1/16/67	12	3.9
		2/15/67	23	6.1
		3/15/67	29	9.0
		4/14/67	17	6.7
Quartz Mountain (PP&L)	9	1/16/67	14	4.8
		2/15/67	28	8.7
		3/15/67	36	10.5
		4/14/67	29	10.5

<u>SNOW COURSE</u> <u>Name</u>	<u>No.</u>	<u>Date</u>	<u>Depth</u> <u>(In.)</u>	<u>Water</u> <u>(In.)</u>
Railroad Overpass	22F5	1/16/67	0	0.0
		2/16/67	8	1.5
		3/14/67	9	1.9
		4/14/67	0	0.0
Salt Creek Falls	22F4	1/16/67	27	9.5
		2/15/67	47	9.6
		3/14/67	64	18.8
		4/14/67	60	21.6
Santiam Junction	21E5	1/13/67	36	12.1
		2/15/67	67	19.5
		3/15/67	58	20.8
		4/14/67	50	19.6
		5/15/67	13	5.5
Silvies	18G1a	4/13/67	34	12.9
Siskiyou Summit	22G20	1/15/67	4	1.6
		2/12/67	17	7.7
		3/14/67	15	5.4
		4/1/67	9	2.9
		4/16/67	3	1.2
South Fork Canal	22G9	4/26/67	0	0.0
Trout Creek	18G5a	4/13/67	36	12.6
Upper Valley	21D24	12/15/67	3	0.8
		1/16/67	0	0.0
		2/15/67	3	0.3
		3/15/67	0	0.0
"V" Lake	18G7a	4/13/67	9	3.2
Weaver Creek	22F11	1/16/67	0	0.0
		2/16/67	5	1.2
		3/16/67	3	1.0
		4/14/67	0	0.0
Whitewater Bridge	21E3	1/13/67	6	2.1
		2/15/67	13	1.9
		3/15/67	3	0.7
		4/15/67	T	T
		5/15/67	0	0.0

PREVIOUSLY UNPUBLISHED IDAHO SNOW SURVEY DATA
1966-67 Season

<u>SNOW COURSE</u> <u>Name</u>	<u>No.</u>	<u>Date</u>	<u>Depth</u> <u>(In.)</u>	<u>Water</u> <u>(In.)</u>
Battle Creek	16G9a	4/13/67	T	T
Bull Basin	16G10a	4/13/67	0	0.0
Hyde Pasture	16G5a	4/13/67	T	T
Red Canyon	16G11a	4/13/67	8	2.5
Succor Creek	16F6a	4/13/67	19	6.1
Triangle	16G4a	4/13/67	0	0.0

PREVIOUSLY UNPUBLISHED NEVADA SNOW SURVEY DATA
1966-67 Season

<u>SNOW COURSE</u> <u>Name</u>	<u>No.</u>	<u>Date</u>	<u>Depth</u> <u>(In.)</u>	<u>Water</u> <u>(In.)</u>
Quinn Ridge	17H6a	4/13/67	0	0.0

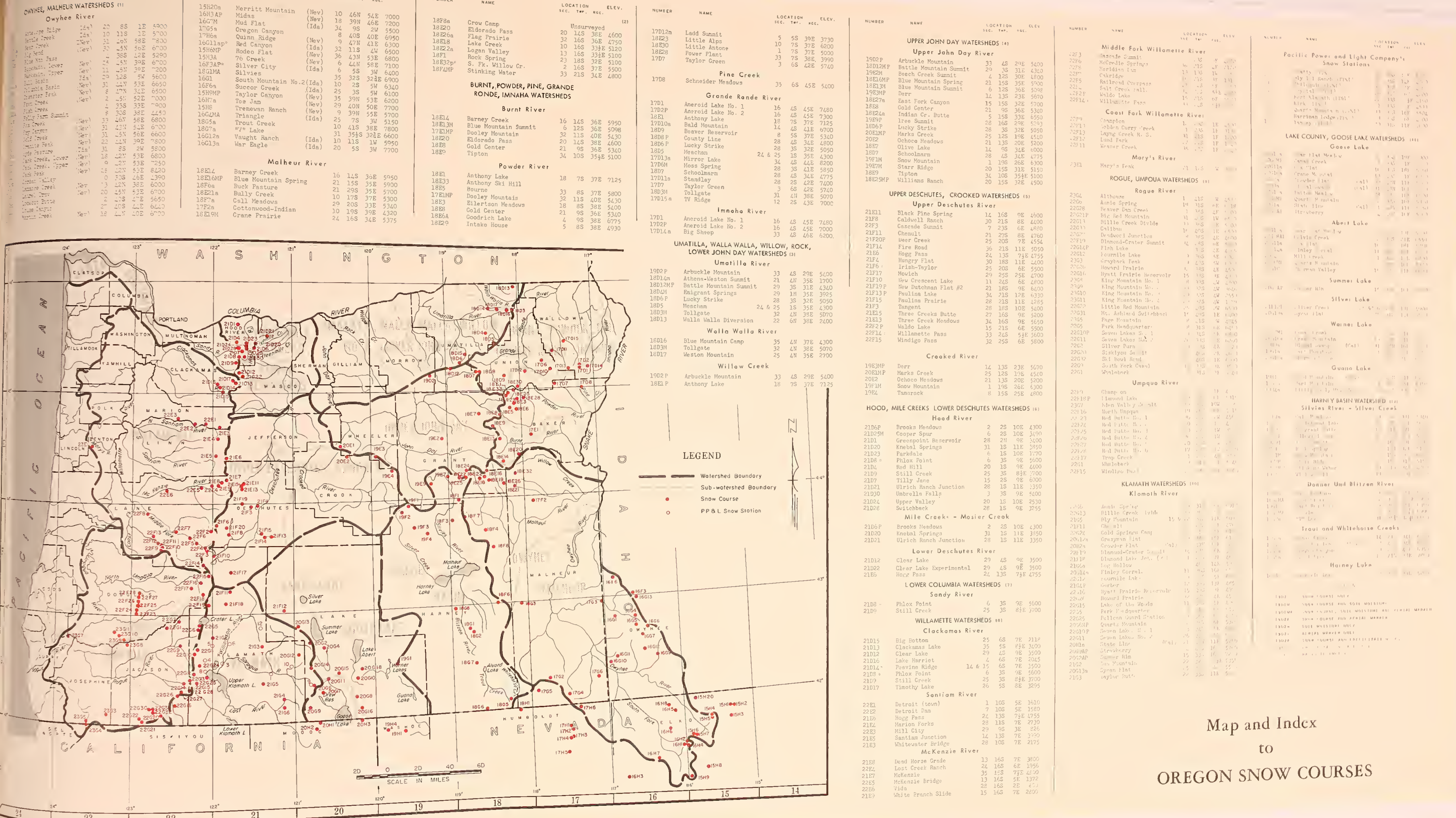
ERRATA: 1967 SNOW MEASUREMENTS PUBLISHED IN ERROR

<u>SNOW COURSE</u> <u>Name</u>	<u>No.</u>	<u>Date</u>	<u>Depth</u> <u>(In.)</u>	<u>Water</u> <u>(In.)</u>
Aneroid Lake #1	17D1			
Previously Published		1/29/67	98	29.0
Correct Data		1/29/67	99	31.7
Aneroid Lake #2	17D2			
Previously Published		1/30/67	93	28.0
		1/30/67	94	30.4
Battle Mountain Summit	18D12 (in Area 4 only)			
Previously Published		12/28/66	1	0.3
Correct Data		12/23/66	1	0.3
Camas Creek	20G8			
Previously Published		4/28/67	39	13.3
Correct Data		4/28/67	39	13.1
Champion	22F9			
Previously Published		4/28/67	95	39.1
Correct Data		4/28/67	93	39.1
Colvin Creek	20G18a			
Previously Published		2/28/67	22	7.3
Correct Data		2/27/67	22	7.3
Cox Flat	20G11a			
Previously Published		1/31/67	26	7.8
Correct Data		1/31/67	10	3.0
Crazyman Flat	20G12a			
Previously Published		2/27/67	27	8.9
Correct Data		2/28/67	27	8.9
Crowder Flat	20H2a			
Previously Published		2/27/67	4	1.3
Correct Data		2/28/67	4	1.3
		3/27/67	2	0.7
Correct Data		3/27/67	2	0.8
Dead Horse Grade	21E8			
Previously Published		3/31/67	50	20.9
Correct Data		3/31/67	57	20.9
Gerber	21G4			
Previously Published		3/1/67	0	0.0
Correct Data		2/28/67	0	0.0

SNOW COURSE Name	No.	Date	Depth (In.)	Water (In.)
Izee	19E9			
Previously Published		12/29/66	16	3.8
Correct Data		12/28/66	16	3.8
McKenzie	21E7			
Previously Published		2/1/67	82	32.4
Correct Data		2/1/67	82	31.4
Previously Published		3/31/67	108	42.5
Correct Data		3/31/67	109	42.5
Marion Forks	21E4			
Previously Published		3/31/67	34	11.8
Correct Data		3/31/67	35	12.2
Previously Published		5/1/67	14	6.2
Correct Data		5/1/67	17	7.4
Mirror Lake	17D13a			
Previously Published		1/30/67	162	48.6
Correct Data		1/30/67	162	55.1
Previously Published		2/24/67	185	70.3
Correct Data		2/24/67	163	62.0
Moss Springs	17D6			
Previously Published		4/2/67	74	26.6
Correct Data		4/2/67	74	25.8
North Umpqua	22F16			
Previously Published		4/28/67	36	13.6
Correct Data		4/27/67	36	13.6
Olive Lake	18E7			
Previously Published		3/27/67	54	18.2
Correct Data		3/27/67	54	18.4
Park Headquarters	22G5 (in Area 9 only)			
Previously Published		4/28/67	161	68.0
Correct Data		4/28/67	161	67.7
Salt Creek Falls	22F4			
Previously Published		1/30/67	38	4.2
Correct Data		1/30/67	38	14.2
Silvies*	18G1			
Previously Published		2/5/67	8	2.4
Correct Data		2/5/67	32	9.6

*In the March 1 bulletin the ground survey was published in Area 1 and the aerial survey in Area 12.

SNOW COURSE Name	No.	Date	Depth (In.)	Water (In.)
Summer Rim	20G2	(in Area 10 only)		
Previously Published		3/31/67	63	20.0
Correct Data		3/31/67	63	20.2
Tangent	21F3			
Previously Published		4/2/67	55	20.8
Correct Data		4/2/67	55	21.8
Taylor Green	17D7			
Previously Published		5/1/67	50	19.0
Correct Data		5/1/67	50	18.8
Trap Creek	22F17			
Previously Published		4/28/67	36	14.3
Correct Data		4/27/67	36	14.3
Umbrella Falls	21D30			
Previously Published		4/1/67	166	67.6
Correct Data		4/1/67	166	69.2
Waldo Lake	22F2			
Previously Published		1/28/67	65	21.7
Correct Data		1/28/67	66	22.0
Previously Published		2/28/67	74	25.3
Correct Data		2/28/67	74	25.2
Weaver Creek	22F11			
Previously Published		3/31/67	0	0.0
Correct Data		3/31/67	3	1.0



OWYHEE, MALHEUR WATERSHEDS (11)				
NAME	LOC.	SEC.	TWP.	RGE.
Owyhee River	(Ida)	20	8S	13
Malheur River	(Ida)	10	11S	13
Malheur River	(Ida)	10	11S	13
Malheur River	(Ida)	10	11S	13
Malheur River	(Ida)	10	11S	13
Malheur River	(Ida)	10	11S	13
Malheur River	(Ida)	10	11S	13
Malheur River	(Ida)	10	11S	13
Malheur River	(Ida)	10	11S	13
Malheur River	(Ida)	10	11S	13

NUMBER	NAME	LOCATION	SEC.	TWP.	RGE.	ELEV.
15H20a	Merritt Mountain	(Nev)	10	46N	54E	7000
16H3AP	Midas	(Nev)	18	39N	38E	7200
17G5	Mud Flat	(Ida)	34	9S	2W	5500
17H5a	Oregon Canyon	(Ida)	8	40S	40E	6950
16G11ap	Quinn Ridge	(Nev)	9	47N	41E	6300
15H6NP	Red Canyon	(Ida)	32	11S	4W	6500
15H3A	Rodeo Flat	(Nev)	36	43N	54E	6800
16F3AP	76 Creek	(Nev)	6	44N	58E	7100
16G1MA	Silver City	(Ida)	6	5S	3W	6400
16G1	Silvies	(Ida)	35	32S	32E	6900
16G6a	South Mountain No. 2	(Ida)	10	2S	5W	6340
15H6MP	Succor Creek	(Ida)	25	3S	5W	6200
16H7a	Taylor Canyon	(Nev)	35	39N	53E	6100
15H5	Toe Jam	(Ida)	29	40N	50E	7700
16G2MA	Tremewan Ranch	(Nev)	9	39N	55E	5700
16G7a	Triangle	(Ida)	25	7S	3W	5150
16G12a	Trout Creek	(Ida)	10	41S	38E	7800
16G13a	Wye Lake	(Ida)	31	35S	32E	6600
16G13a	Vaught Ranch	(Ida)	10	11S	1W	5950
16G13a	War Eagle	(Ida)	20	5S	3W	7700

NAME		LOCATION		SEC.	TWP.	RGE.	ELEV.
18F8a	Crow Camp		Unsurveyed				
18E20	Eldorado Pass	20	14S	38E		4600	
18E26a	Flag Prairie	32	16S	36E		4750	
18E18	Lake Creek	10	16S	33E		5120	
18E22a	Logan Valley	13	16S	33E		5120	
18F1	Rock Spring	23	18S	32E		5100	
18E32p ^f	S. Fk. Willow Cr.	2	16S	37E		5500	
18F4MP	Stinking Water	33	21S	34E		4800	
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS							
Burnt River							
18E14	Barney Creek	16	14S	36E		5950	
18E13M	Blue Mountain Summit	6	12S	36E		5098	
17E1MP	Dooley Mountain	32	11S	40E		5430	
18E20	Eldorado Pass	20	14S	38E		4600	
18E5	Gold Center	21	9S	36E		5340	
18E9	Tipton	34	10S	35E		5100	
Powder River							
18E1	Anthony Lake	18	7S	37E		7125	
18E33	Anthony Ski Hill						
18E5	Bourne	33	8S	37E		5800	
17E1MP	Dooley Mountain	32	11S	40E		5430	
18E3	Elbertson Meadows	18	8S	38E		5400	
18E6	Gold Center	21	9S	36E		5340	
18E6A	Goodrich Lake						
18E29	Intake House						

NUMBER	NAME	LOCATION	SEC.	Twp.	RGE.	ELEV.
17D12m	Ladd Summit		5	5S	39E	3730
18E23	Little Alps	10	7S	37E	6200	
18E30	Little Antone	1	7S	37E	5000	
18E28	Power Plant	33	7S	38E	3990	
17D7	Taylor Green	3	6S	42E	5740	
Pine Creek						
17D8	Schneider Meadows	35	6S	45E	5400	
Grande Ronde River						
17D1	Aneroid Lake No. 1	16	4S	45E	7480	
17D2P	Aneroid Lake No. 2	16	4S	45E	7300	
18E1	Anthony Lake	18	7S	37E	7125	
17D10a	Bald Mountain	14	4S	41E	6700	
18D9	Beaver Reservoir	8	5S	37E	5340	
18D6P	County Line	28	4S	34E	4800	
18E5	Lucky Strike	28	3S	32E	5050	
18E5	Meacham	24 & 25	1S	35E	4300	
17D13a	Mirror Lake	34	4S	44E	8200	
17D6M	Moss Spring	28	3S	41E	5850	
18D7	Schoolmarm	28	4S	34E	4775	
17D11a	Standley	28	2S	42E	7400	
17D7	Taylor Green	3	6S	42E	5740	
18D3M	Tollgate	31	4N	38E	5070	
17D15a	TV Ridge	12	2S	43E	7000	
Imnaha River						
17D1	Aneroid Lake No. 1	16	4S	45E	7480	
17D2P	Aneroid Lake No. 2	16	4S	45E	7300	
17D15a	Big Sheep	33	4S	46E	6200	

NUMBER	NAME	LOCATION	SEC.	TWP.	RGE.	ELEV.
UPPER JOHN DAY WATERSHEDS (14)						
Upper John Day River						
19D2P	Arbuckle Mountain	(Ida)	33	4S	29E	5400
18D12MP	Battle Mountain Summit	(Ida)	29	3S	31E	4340
19E2M	Beech Creek Summit	(Ida)	4	12S	30E	4800
18E1GMP	Blue Mountain Spring	(Ida)	21	15S	35E	5900
18E13M	Blue Mountain Summit	(Ida)	6	12S	36E	5098
19E3MP	Derr	(Ida)	14	13S	23E	5670
18E27a	East Fork Canyon	(Ida)	15	15S	32E	5700
18E8	Gold Center	(Ida)	21	9S	36E	5340
18E22a	Indian Cr. Butte	(Ida)	5	15S	33E	6550
19E9P	Lee Summit	(Ida)	28	16S	29E	5943
18D6P	Lucky Strike	(Ida)	28	3S	32E	5050
20E1MP	Marks Creek	(Ida)	25	12S	19E	4540
20E2	Ochocho Meadows	(Ida)	21	13S	20E	5200
18E7	Olive Lake	(Ida)	14	9S	34E	6000
18D7	Schoolmarm	(Ida)	28	4S	34E	4775
19E1M	Snow Mountain	(Ida)	1	19S	26E	6300
19E1M	Starr Ridge	(Ida)	20	15S	31E	5150
18E9	Tipton	(Ida)	34	10S	35E	5100
18E29MP	Williams Ranch	(Ida)	20	15S	32E	4500
UPPER DESCHUTES, CROOKED WATERSHEDS (15)						
Upper Deschutes River						
21E11	Black Pine Spring	(Ida)	14	16S	9E	4500
21F8	Caldwell Ranch	(Ida)	30	21S	8E	4400
22F3	Cascade Summit	(Ida)	7	23S	6E	4860
21F11	Chemult	(Ida)	21	27S	8E	4760
21F20P	Deer Creek	(Ida)	25	20S	7E	4554
21F14	Fire Road	(Ida)	36	21S	11E	5050
21F5	Hogg Pass	(Ida)	24	13S	74E	4755
21F6	Hungry Flat	(Ida)	30	18S	11E	4400
21F6	Irish-Taylor	(Ida)	25	20S	6E	5500
21F17	Novich	(Ida)	29	25S	25E	4700
21F10	New Crescent Lake	(Ida)	11	24S	6E	4800
21F19P	New Dutchman Flat #2	(Ida)	21	18S	9E	6400
21F13P	Paulina Lake	(Ida)	34	21S	17E	6300
21F15	Paulina Prairie	(Ida)	28	21S	11E	4985
21F3	Tangent	(Ida)	28	18S	10E	5400
21E15	Three Creeks Butte	(Ida)	27	16S	9E	5200
21E13	Three Creek Meadows	(Ida)	34	16S	9E	5650
22E2P	Waldo Lake	(Ida)	15	21S	6E	5500
22E14	Willamette Pass	(Ida)	33	24S	54E	5600
22F15	Windigo Pass	(Ida)	32	25S	6E	5800
Crooked River						
19E2MP	Derr	(Ida)	14	13S	23E	5670
20E1MP	Marks Creek	(Ida)	25	12S	19E	4540
20E2	Ochocho Meadows	(Ida)	21	13S	20E	5200
19E1M	Snow Mountain	(Ida)	1	19S	26E	6300
19E4	Tamarack	(Ida)	8	15S	25E	4800

NUMBER	NAME	LOCATION	SEC.	TWP.	RGE.	ELEV.	NUMBER
Middle Fork Willamette River							
22F3	Descente Summit		15	8	8	4070	
22F6	McCredie Springs		15	8	8	4100	
22F8	Meridian Inn		14	13S	74E	4100	
22F5	Carbridge		10	15	10	1311	
22F5	Railroad Overpass		17	15	10	1311	
22F1	Salt Creek Fall.		16	15	54E	3800	
22F2F	Waldo Lake		15	15S	68E	3800	
22F14	Willamette Falls		14	15S	68E	3800	
Coast Fork Willamette River							
22F9	Chapman		1	15S	1E	3500	1
22F11	Golden Curry Creek		1	15S	1E	3100	
22F13	Laying Creek R. S.		31	15S	1E	1500	
22F12	Lund Park		17	15S	1E	1500	
22F11	Waver Creek		36	15S	1E	1500	
Mory's River							
23E1	Mary's Fork		21	15S	7E	1500	
ROGUE, UMOUA WATERSHEDS 181							
Rogue River							
23G4	Althousen		1	41S	8E	2500	
23G6	Amnio Spring		19	15S	6E	1118	
23G28	Peavine Dam Creek		11	15S	4E	1000	
23G21P	Big Red Mountain		31	15S	4E	1000	

NAME	LOCATION	SEC.	TWP.	RGE.	ELEV.
Electric Power and Light Company's Snow Stations					
STATION	NAME	SEC.	TWP.	RGE.	ELEV.
22F11	Blackfoot Ranch (Ida)	16	12S	47E	7100
22F12	McCrindle Springs (Ida)	16	12S	47E	7100
22F13	North Fork (Ida)	13	13S	1W	5000
22F14	North Fork (Ida)	13	13S	1W	5000
22F15	North Fork (Ida)	13	13S	1W	5000
22F16	North Fork (Ida)	13	13S	1W	5000
22F17	North Fork (Ida)	13	13S	1W	5000
22F18	North Fork (Ida)	13	13S	1W	5000
22F19	North Fork (Ida)	13	13S	1W	5000
22F20	North Fork (Ida)	13	13S	1W	5000
22F21	North Fork (Ida)	13	13S	1W	5000
22F22	North Fork (Ida)	13	13S	1W	5000
22F23	North Fork (Ida)	13	13S	1W	5000
22F24	North Fork (Ida)	13	13S	1W	5000
22F25	North Fork (Ida)	13	13S	1W	5000
22F26	North Fork (Ida)	13	13S	1W	5000
22F27	North Fork (Ida)	13	13S	1W	5000
22F28	North Fork (Ida)	13	13S	1W	5000
22F29	North Fork (Ida)	13	13S	1W	5000
22F30	North Fork (Ida)	13	13S	1W	5000
22F31	North Fork (Ida)	13	13S	1W	5000
22F32	North Fork (Ida)	13	13S	1W	5000
22F33	North Fork (Ida)	13	13S	1W	5000
22F34	North Fork (Ida)	13	13S	1W	5000
22F35	North Fork (Ida)	13	13S	1W	5000
22F36	North Fork (Ida)	13	13S	1W	5000
22F37	North Fork (Ida)	13	13S	1W	5000
22F38	North Fork (Ida)	13	13S	1W	5000
22F39	North Fork (Ida)	13	13S	1W	5000
22F40	North Fork (Ida)	13	13S	1W	5000
22F41	North Fork (Ida)	13	13S	1W	5000
22F42	North Fork (Ida)	13	13S	1W	5000
22F43	North Fork (Ida)	13	13S	1W	5000
22F44	North Fork (Ida)	13	13S	1W	5000
22F45	North Fork (Ida)	13	13S	1W	5000
22F46	North Fork (Ida)	13	13S	1W	5000
22F47	North Fork (Ida)	13	13S	1W	5000
22F48	North Fork (Ida)	13	13S	1W	5000
22F49	North Fork (Ida)	13	13S	1W	5000
22F50	North Fork (Ida)	13	13S	1W	5000
22F51	North Fork (Ida)	13	13S	1W	5000
22F52	North Fork (Ida)	13	13S	1W	5000
22F53	North Fork (Ida)	13	13S	1W	5000
22F54	North Fork (Ida)	13	13S	1W	5000
22F55	North Fork (Ida)	13	13S	1W	5000
22F56	North Fork (Ida)	13	13S	1W	5000
22F57	North Fork (Ida)	13	13S	1W	5000
22F58	North Fork (Ida)	13	13S	1W	5000
22F59	North Fork (Ida)	13	13S	1W	5000
22F60	North Fork (Ida)	13	13S	1W	5000
22F61	North Fork (Ida)	13	13S	1W	5000
22F62	North Fork (Ida)	13	13S	1W	5000
22F63	North Fork (Ida)	13	13S	1W	5000
22F64	North Fork (Ida)	13	13S	1W	5000
22F65	North Fork (Ida)	13	13S	1W	5000
22F66	North Fork (Ida)	13	13S	1W	5000
22F67	North Fork (Ida)	13	13S	1W	5000
22F68	North Fork (Ida)	13	13S	1W	5000
22F69	North Fork (Ida)	13	13S	1W	5000
22F70	North Fork (Ida)	13	13S	1W	5000
22F71	North Fork (Ida)	13	13S	1W	5000
22F72	North Fork (Ida)	13	13S	1W	5000
22F73	North Fork (Ida)	13	13S	1W	5000
22F74	North Fork (Ida)	13	13S	1W	5000
22F75	North Fork (Ida)	13	13S	1W	5000
22F76	North Fork (Ida)	13	13S	1W	5000
22F77	North Fork (Ida)	13	13S	1W	5000
22F78	North Fork (Ida)	13	13S	1W	5000
22F79	North Fork (Ida)	13	13S	1W	5000
22F80	North Fork (Ida)	13	13S	1W	5000
22F81	North Fork (Ida)	13	13S	1W	5000
22F82	North Fork (Ida)	13	13S	1W	5000
22F83	North Fork (Ida)	13	13S	1W	5000
22F84	North Fork (Ida)	13	13S	1W	5000
22F85	North Fork (Ida)	13	13S	1W	5000
22F86	North Fork (Ida)	13	13S	1W	5000
22F87	North Fork (Ida)	13	13S	1W	5000
22F88	North Fork (Ida)	13	13S	1W	5000
22F89	North Fork (Ida)	13	13S	1W	5000
22F90	North Fork (Ida)	13	13S	1W	5000
22F91	North Fork (Ida)	13	13S	1W	5000
22F92	North Fork (Ida)	13	13S	1W	5000
22F93	North Fork (Ida)	13	13S	1W	5000
22F94	North Fork (Ida)	13	13S	1W	5000
22F95	North Fork (Ida)	13	13S	1W	5000
22F96	North Fork (Ida)	13	13S	1W	5000
22F97	North Fork (Ida)	13	13S	1W	5000
22F98	North Fork (Ida)	13	13S	1W	5000
22F99	North Fork (Ida)	13	13S	1W	5000
22F100	North Fork (Ida)	13	13S	1W	5000



The Following Organizations Cooperate in the Oregon Snow Survey Work

STATE

- Idaho Cooperative Snow Surveys
- Nevada Cooperative Snow Surveys
- Oregon State University
- Oregon State Engineer and Corps of State Watermasters
- Oregon State Highway Engineers
- Soil and Water Conservation Districts of Oregon

COUNTY

- Douglas County Water Resources Survey

FEDERAL

- Department of Agriculture
 - Cooperative Extension Service
 - Forest Service
 - Soil Conservation Service
- Department of Commerce
 - Weather Bureau
- Department of the Interior
 - Bonneville Power Administration
 - Bureau of Land Management
 - Bureau of Reclamation
 - Fish and Wildlife Service
 - Geological Survey
 - National Park Service
- Department of National Defense
 - Corps of Army Engineers

PUBLIC UTILITIES

- Pacific Power and Light Company
- Portland General Electric Company
- California-Pacific Utilities Company

MUNICIPALITIES

- City of Baker
- City of La Grande
- City of The Dalles
- City of Walla Walla

IRRIGATION DISTRICTS

- Arnold Irrigation District
- Associated Ditch Companies
- Burnt River Irrigation District
- Central Oregon Irrigation District
- East Fork Irrigation District
- Grants Pass Irrigation District
- Hood River Irrigation District
- Jordan Valley Irrigation District
- Juniper Flat Irrigation District
- Lakeview Water Users, Incorporated
- Medford Irrigation District
- Middle Fork Irrigation District
- North Board of Control - Owyhee Project
- North Unit Irrigation District
- Ochoco Irrigation District
- Rogue River Valley Irrigation District
- South Board of Control - Owyhee Project
- Squaw Creek Irrigation District
- Talent Irrigation District
- Tumalo Project
- Vale-Oregon Irrigation District
- Warm Springs Irrigation District

PRIVATE ORGANIZATIONS

- Amalgamated Sugar Company
- The Crag Rats, Hood River, Oregon

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